

Ralph F. Shaw

The University of Alberta
in the
War of 1939-45



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Edmonton, Alberta
September, 1948

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FOREWORD

At the beginning of 1943, the President established a committee on war records, to gather together an account of the wartime activities of the university up to that time and to maintain written records until the end of the war. That committee had nine members, in addition to a chairman, charged respectively with responsibility for local records of the Canadian Officers Training Corps, the University Air Training Corps, the University Naval Training Division, the Women's War Services, war research, health services to the armed forces, accelerated courses, service training courses, enlistment and service of members of the University. Most of the committee members filed annual reports, summaries of which appeared in the President's annual reports.

Shortly after the end of the war the Board of Governors appointed Mr. L. G. Thomas, Assistant Professor of History, to write a war history of the university. The foregoing documents were turned over to Mr. Thomas, who also searched farther afield for accurate and complete information, as indicated by his list of references at the end of the paper. Committee members and others with special knowledge willingly answered his questions and read sections of his manuscript.

The paper stands as a brief but reasonably comprehensive and carefully sifted account of the University of Alberta in the War of 1939-45, necessarily as seen through the eyes of Mr. Thomas.

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ROBERT NEWTON,
President.

September 23, 1948.

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The University of Alberta and the War of 1939-45

The University in War and Peace

War is the negation of everything the university stands for, of everything the university seeks to preserve. War is destructive, the university is, or should be, creative. The true university is conservative, the home sometimes of lost causes; war is radical, a ruthless eliminator of the seemingly obsolete, of what appears to be the practically unimportant. The university is contemplative, with action incidental; war worships action for its own sake and is without concern for the realities from which that action springs. The university is concerned with the permanent, war with the temporary expedient which may seem to seek to defend the permanent but always ends by changing it. In a sense the university and war represent the eternal opposition of good and evil, of rest and action, of permanence and change. Out of those oppositions the world we know has grown. In this painful process the violent changes of war have sometimes provided the force that pushes men towards some distant goal, different but not necessarily to be assessed in any accepted terms of good and evil.

The University Community, September, 1939

The outbreak of war in 1939 thrust the University of Alberta, in common with all Canadian universities, into a new world, a world whose shape and meaning could not quickly be discerned but a world which in spite of those shadowy outlines seemed to demand some concrete course of action. The events of September 1939 did not come entirely as a surprise to the university community, for Munich had shaken many of its members out of an isolationism which was perhaps less complete because of the close ties that link university people with the world at large. Only a few continued, with a pathetic blindness, to cling to a belief that war should not be the answer to war. As in the Canadian community as a whole, the war was accepted in the university, not as a high adventure, but as

a grim burden, a responsibility incurred by our privileges as free men. It was in this atmosphere, the grey and unheroic atmosphere of that first winter, that the university's members sought to answer the riddle of war service.

Aspects of the University's War Service

The university's war service had many aspects, closely related and merging almost imperceptibly into one another. In the first place its graduates and its staff provided a reservoir of men and women with a wide variety of special skills and abilities, not necessarily technical but so moulded as to fit into a war that was widely regarded as a war of specialists. Secondly, it had staff, buildings, equipment and organization that could be used to produce certain kinds of trained people, who would obviously be sorely needed in greater numbers than were available in a Canada at peace. These were people who could be produced not only in the regular course but in special short courses. Thirdly, the university had, in its buildings and equipment and more especially, in the conditions that prevailed in the University of Alberta in 1939, in its staff, the means to carry out research into war problems. Fourthly, and closely related to the second and third aspects, it had facilities which might be utilized directly by government agencies, operating on university premises but not under university control. Fifthly, and most important, most difficult and least tangible, was the service which the university might render by keeping alive the values for which it stands, those values of which war is the negation, the permanent values of western Christian civilization. To engage to the fullest in their defence, to defend them without losing them or seeing them transformed into a mockery, was the highest of demands made upon the university's members. The true war record of the university, the measure of its achievement over the years, is written in the individual records of the men and women of Canada whose lives it moulded and perhaps transformed long before anyone had heard of Hitler or Hitler's war.

The First Phase of the War

The autumn, winter and spring that followed the beginning of the war will be remembered for that peculiar atmosphere of unreality that pervaded the Allied countries until the fall of France. The enrollment of the university was larger than

it had ever been and the university population was encouraged alike by the highest authorities and by the recruiting offices to believe that they could best serve their country by completing their respective courses, by carrying on their tasks as instructors, administrators or students. In those months there were many who thought of the war as something that might be won with our surpluses. The ranks of the local unit of the Canadian Officers' Training Corps swelled to include more than a third of the male student body as well as a number of the faculty and a good many graduates, some of whom took an active part in the organization of the unit. The various schemes which had been drawn up before the war for the registration of scientifically trained personnel went into effect. The students, both men and women, organized for war work. President Kerr and the Board of Governors offered to place at the disposal of the federal government any of the facilities of the university that might be of direct use and a few members of the faculty were granted leave of absence to take up work directly connected with the war. The war had come to the university but in common with the rest of the country, the university's was a partial war effort, reflecting the psychological and physical unpreparedness of the Allied countries, an unpreparedness exaggerated by the apparent stalemate on the western front and the remoteness of Canada from the savage realities of the war in Poland.

That first phase of the war, when Canadians tried to believe that they could help to win the war without any real alteration in their way of life, that they could satisfy a war machine merely by letting it take up the slack in their economy, ended in June, 1940. After the fall of France and the evacuation from Dunkirk, Canada knew that Britain alone remained between her coasts and the enemy. The tempo of the war effort increased abruptly and in the years following did not slacken, although as organization gained coherence, its rhythm became more even. The list of graduates, of staff and of former students serving in the forces grew steadily longer; longer too grew the lists of those killed and wounded, missing and prisoners of war. There were many changes in the university itself. An increasing number of the staff, academic and administrative, joined the services or went into war work of various kinds and properly trained replacements were diffi-

cult to find. The enrollment fell much less than was expected; each September the registration confounded those who had expected the university to be stripped of students as it had been during the war of 1914-1918 when enrollment dropped by almost a third. Thus a weakened university staff, working with physical equipment that was already inadequate long before 1939, was obliged to cope with an equally large instructional load and at the same time shoulder new burdens dictated by special war courses, war research and other war-time demands upon their time. The university became as the years passed increasingly involved in the war, until ultimately the conflict dominated every phase of its life and the lives of its members.

Service Training in the University: C.O.T.C., U.A.T.C., U.N.T.D.

Perhaps no part of the university's life reflected the history of the war years more accurately than the local contingent of the Canadian Officers' Training Corps and the related organizations established by the navy and the air force to ensure that the supply of university trained men was not entirely monopolized by the army. The C.O.T.C. contingent had been in existence since the previous war, its continuance sometimes threatened by the curious confusion between security and disarmament so prevalent in Canada between the wars but always assured of a membership by the university's requirement that all male students in their first year, with a few exceptions, should satisfy a minimum requirement in physical education. This could be done by enrolment in the C.O.T.C., a discipline often held by students to be less rigorous than the alternative calisthenics. In addition the C.O.T.C. members were paid for attendance at parades and these factors, added to the devotion of a few realists and militarists among the staff and students, made possible the survival of the unit. Yet even in the depression years when summer employment was difficult to find, members of the unit showed little interest in the possibility of summer training with the militia. The temper of the undergraduate in the 1930's was certainly not exorbitantly militarist and in this they reflected the temper of Canada at large.

At the outbreak of war in September, 1939, the unit was in the process of a change in command. Lieut. Col. E. H. Strickland, professor of Entomology and one of those members of

the faculty whose loyal service had kept the unit in being, had just completed a five year period as commanding officer. He was succeeded by Lieut. Col. P. S. Warren of the department of Geology. At the same time the sergeant instructor who had been in charge of instruction for ten years was replaced and several student officers, who had been active in instructional work in the unit, went on active service. Changes like these were to bedevil the C.O.T.C. through the early years of the war. A certain confusion was indeed inevitable, especially as no indication was received from defence headquarters as to the C.O.T.C.'s prospective part in the war.

During the 1939-40 session military training remained optional even for first-year students but the size of the unit increased substantially from 285 all ranks in 1938-39¹ to 510 on strength on March 17, 1940.² For the first time unit members wrote not, as in the past, the Imperial War Office promotion examinations but papers set by Canadian National Defence Headquarters. The results obtained by the infantry and engineers were not impressive but some of the specialists—artillery, signals and medicals—made a better showing. In this year alumni of the university, former members of the C.O.T.C., also received training, not only in Edmonton but in Calgary, Medicine Hat and Lethbridge. Two hundred and thirty-seven men from all centres attended the unit's first camp held at Sarcee Camp, from the 15th to the 24th of May. At camp, as during the term, difficulties beset the unit. When the first division was organized the shortage of rifles led to the commandeering of all rifles not on charge to units that were being called up, with unfortunate results for the C.O.T.C.'s training programme. When many of the rifles were pronounced unfit for service, they were secured by the C.O.T.C. and the Ross rifle of unhappy memory in the war of 1914-1918 helped to make up the deficit. Uniforms were, in that early stage of the war, almost non-existent and as the C.O.T.C. uniforms on hand were insufficient for the swollen unit they were issued only to a few cadets. A good many were borrowed by officers going on active service. The change in drill from ranks of four to ranks of three was another difficulty and the annual inspec-

¹Strength of the unit in 1937-38 was 240 all ranks and this was normal for the pre-war years. The Munich crisis probably explains the rise in 1938-39.

²Out of 1395 men in attendance at the fall session of 1939-40.

tion left few with the illusion that the new drill had been mastered by the entire unit.

During the second wartime session of the university, 1940-41, the C.O.T.C. reflected the change in the attitude to the war general in Canada after the fall of France. During the summer of 1940 Canada adopted a national scheme of compulsory military training.³ Into this scheme the universities were fitted by the requirement that all regular male students in recognized universities should undergo military training equivalent to that received by men called out under the National War Service Regulations. This equivalent was held to be one hundred and ten hours training during the regular university session and two weeks of camp training during the summer.

To fulfill these requirements the university skating rink was, in 1940, transformed into a drill hall, the beginning of the academic day was moved back from eighty-thirty to the spartan hour of eight and the two hours from four to six were devoted to military training. By the requirements of National Defence Headquarters this compulsory training was to be carried out by a "training battalion" auxiliary to the C.O.T.C., with the latter responsible for the training of the former. This "auxiliary battalion", unlike the C.O.T.C., at first held no military status and members were not paid or provided with uniforms or arms. During the session of 1940-41 students and staff members taking training numbered 1,292, 576 in the C.O.T.C., 716 in the auxiliary battalion.⁴ Once again the contingent was, in the general scarcity of men with appropriate qualifications, handicapped by lack of instructors and frequent changes in those available as well as by lack of space and equipment for proper training. Only one student refused to meet the requirements and his case was finally reported to and dealt with by the Alberta War Services Board.

By the beginning of the session of 1941-42 the military training given within the university was settling into routine. Specialist training was discontinued for as the war went on it was increasingly obvious that an organization like the C.O.T.C.

³By the Governor General's proclamation established by Order in Council P.C. 4185 of August 27, 1940.

⁴Out of 1349 men in the full session.

could give its best service at the elementary level. The numbers on strength were considerably smaller (481 in the C.O.T.C., 384 in the Auxiliary Battalion) than in the preceding year, largely as a result of the decreasing enrollment in the university, the accelerated courses in some faculties and the increased number who had satisfied minimum requirements for military training. In 1942 the regulations affecting the military training of university students were more clearly defined by an order in council providing that any male student who failed a term or final examination during the university year, who refused to take training, or whose training was unsatisfactory would be reported to the Mobilization Board for call to the armed services. Students were also restricted in regard to changes of course of studies, pursuit of graduate work and pursuit of studies outside Canada.⁵

Until the summer of 1942 military training in the university had been directed solely towards the provision of a supply of university men for the army. This of course had not precluded a large number of members of the university from joining the air force and the navy; it was indeed a well-worn quip that Sarccee Camp was the best recruiting centre in Alberta for the R.C.A.F. It was nevertheless apparent to the other services that, under the existing system, a very large majority of the university's enlistments would be in the army and that this would be increasingly the case as time passed. Accordingly in the summer of 1942 No. 8 University Air Training Corps was established at Alberta. In March, 1943, negotiations were begun for the establishment of a Naval Training Unit. In 1941-42 women students were required to do forty hours of war service work, a quota made compulsory at their own request. Women undergraduates who were physically fit did three hours service a week—St. John's Ambulance First Aid, Home Nursing, ARP work, Signalling, Red Cross, clerical work, canteen work, work with precision instruments and drill.

War service training in the university was thus thoroughly organized by the end of 1943-44. The C.O.T.C. by 1945 had twelve hundred of its former members on active service, with nearly six hundred holding commissions. The naval and air

⁵Order in Council P.C. 1822, sec. 17.

force units, much smaller and organized as they were much later in the war, made a proportionate contribution. The University Naval Training Division began its first full year of activity with fifty-six ratings in 1943-44 and at the beginning of the following year had a new entry class of seventy-eight and a total strength of a hundred and four. The burden of training in the U.N.T.D. was assumed by the naval establishment in Edmonton, H.M.C.S. "Nonsuch". This procedure differed somewhat from that which was followed in the C.O.T.C., where members of the university provided most of the instruction. The University Air Training Corps followed a procedure somewhere between these extremes. The latter unit had a strength of one hundred and eighty-five during its first year, 1942-43, which dropped to one hundred and forty-one in 1943-44 and ninety-nine in 1944. The decline was in part due to transfers to active service in the air force and in part to the policy adopted toward the end of the war of reducing air force recruiting. The unit came to a rather sudden end when orders were received on December 28, 1944 to disband the unit as of December 31, 1944, "in line with the general reduction of the British Commonwealth Air Training Plan." The universities had been led to expect the continuance of the university air squadrons as a peace-time policy and their abolition led to some difficulty, as members of the squadron were required by wartime regulations to undergo a specified number of hours of military training, a period naturally not completed by the end of December. With some difficulty, the members of the squadron were absorbed into the C.O.T.C. but the sudden reversal of policy had an unfortunate effect on morale. Apart from such administrative difficulties as this in its relations with the parent service, which occurred with regrettable frequency, the record of the squadron was, in the words of its commanding officer, one of which the university and the unit "have every reason to be proud."

The University and Compulsory War Service Training

Although the idea of compulsory service training for students was readily accepted by the university, it presented many difficulties in administration and interpretation. It was clearly desirable that the university should not become a shelter for those desirous of evading their responsibility but

in the state of the war service regulations the weight of decision was thrown upon the university authorities. Some questioned the utility of the training received in view of the heavy demand it made on the time and energy of students, especially as the army authorities frequently seemed indifferent to the C.O.T.C. as a source of officer material. The abandonment of specialist training meant that members of the unit after two years would merely be repeating the basic training already received, although some useful experience would of course be gained by those who acted in instructional or administrative capacities. This situation was remedied by the decision that compulsory military training should be continued for two years only or until such time as the student should complete all his tests of elementary training. After this students could continue training on a voluntary basis. As medical and dental courses were in the process of acceleration and as senior science students were needed as class assistants the reasonableness of this decision was obvious. The general impression was that although military training did not seriously affect academic achievement, it did hamper extra-curricular activities, as the demise of various student organizations amply testified.

During the war every university was faced by an important question. Under conditions of emergency, who should be given a university education? This was a question of more than local importance for it involved the whole future of higher education in Canada and to the question there were many answers. At the beginning of the war some held that the universities could be most effective if they held to their peace time ways with a minimum of disturbance of their staffs and student bodies. At the opposite end of the scale were those who, with a greater comprehension of the meaning of total war but with perhaps less perfect appreciation of the distinctions between the totalitarian and the liberal state, advocated the closing of the universities or at least their transformation into institutions devoted solely to research and training directly connected with the war.⁶ The latter answers commended themselves neither to the universities nor to the Canadian government. In the first wartime session there were

⁶Hitler's Germany had such a programme: *Zweckwissenschaft* (Science with an immediate end in view).

no restrictions upon registration and university members were indeed encouraged to continue their studies or their teaching duties. This did not prevent an extensive enlistment and, in spite of the record freshman class of 1939, there were probably many young men who in the normal course of events would have come to the university who decided to join the services instead.

The adoption of a national war service training programme in 1940 brought the question to a head. The universities were entrusted with the military training of their students but as the period of basic training was considerably shorter than any university course, this was not a complete answer. Should government regulation go further and prescribe the kind of academic training that the universities should give in war-time? Should the study of the liberal arts, the humanities and even the social sciences be continued? Or should instruction be offered in only the so-called practical subjects, those which alone, so some said, could make a direct contribution to the war effort? A final answer was not given until February, 1944, when the conditions governing postponement of call under the National Selective Service were finally laid down. As the lower callable age of recruits by the fall of 1943 stood at 18½ years, registration at universities like Alberta that demanded Grade XII standing for admission would have been seriously affected. On the recommendation of the Universities Conference, National Selective Service provided that if a prospective student had attained an educational standing recognized by the Department of Education of his province as equal to that which should have been attained by one of his age, he should be considered eligible for postponement. This took care of the first year students. After this year of university work was completed, the student again became subject to call unless enrolled in a course defined by the Director of National Selective Service on the recommendation of a University Advisory Board as essential to the national interest or contributing to the prosecution of the war. These courses were defined as medicine, dentistry, engineering, architecture, agriculture, pharmacy, forestry, education, commerce, veterinary science, and specialized courses in mathematics, physics, chemistry, biology or geology. This covered all the professional courses offered at the University of Alberta with the

important exception of law. Law and the arts course were not, however, abolished but were covered in a general provision that a student in any university course not included in the above would be considered as pursuing a course essential to the national interest if he were in the upper half of all the students enrolled in his course. Students who failed were already being reported to National Selective Service and the structure was completed by placing women students in the deferred class. However as the labour situation was held to be less serious in early 1944, failures by women students were dealt with leniently.

The tendency of these regulations was to direct university students into the professional and scientific courses, reinforcing a tendency that seems to have been present in any case. Some parents were not altogether reluctant to see their sons in the comparatively sheltered haven of the professional schools where safety could be respectably combined with the assurance that the young man was preparing himself for a career essential to the national interest. The students, puzzled by the attitude of the national authorities and the changeable recruiting policy, quite as naturally sought a way in which they could train themselves for service. In the materialist culture of the west, the emphasis had for long been on what was called the practical. The Faculty of Arts was, in fact, being less cavalierly treated than the regulations would suggest. Its courses were the required basis for medicine, for dentistry, for commerce and for education and in a small university like Alberta, its scientists and mathematicians did much of the teaching of engineering and agriculture. It was, nevertheless, in the faculties of Arts and Law that the effects of war were most apparent and especially in the humanities and social studies where enlistment for war service made heavy inroads into staff and students alike. There were during the war years brilliant students in English, in modern languages, history, philosophy and classics, but few remained to complete the honours courses some had begun although they were of course comfortably within the required upper half. It was perhaps not surprising that those who were concerned most directly with abstractions, with ideas and ideals rather than with the more concrete subject matter of the sciences, highly theoretical though those sciences are, should have been

eager to have a direct contact with a war that was so much a war of ideas and ideals. But perhaps this was only vaguely felt; perhaps stronger was the sense of discomfort in a world so overwhelmingly preoccupied with the severely practical.

Compared with policies adopted in the United States with regard to higher education, where the whole structure was virtually made over, the Canadian regulations caused a minimum dislocation in the universities of the country, Alberta among them. The regulations were a compromise between extremes and, like most compromises, had undignified aspects. There was no escape for the university or for university people from the fact that war is a negation of the things for which a university should stand. The death of those values would be more tragic than the withholding of any material contribution that the university could make. Yet for many it was impossible to escape from the conviction that those values could best be preserved by at least a willingness to fight for them on fields somewhat removed from the campus of the university.

Effect of the War on Student Enrollment

The effect of the war on student registration differed noticeably from that of the war of 1914-1918, when the number of students at the infant university declined by almost a third.⁷ The number of students, which had fallen off slightly during the depths of the depression, rose gradually during the years of recovery after 1934 and reached a peak of 2,327 in 1939-40, the first year of the war. It declined to 2,023 in 1943-44. In 1944-45 there was, as a result of the assumption of all teacher training by the university, a sharp rise to 2,679 and after 1945 Alberta shared in the unprecedented increase in enrollment that crowded all Canadian universities not only with returned men and women but also with civilians in record numbers.

The effect of the war was greatest not on the number of students in attendance but on their distribution by faculties and the direction of their educational programme.⁸ The Faculty of Law and the Bachelor of Arts programme, where the training emphasizes the study of the humanities, history

⁷See Table I, Registration, University of Alberta.

⁸See Table II, The War and Student Enrollment.

and the social sciences, were most seriously affected. By 1944-45 the Faculty of Law had only nine students and only ten were registered in the required preliminary years of Arts. In the bachelor of arts programme there were in 1944-45 only 22 men and 79 women, where in 1939-40 there had been 93 men and 154 women. These figures should be considered in light of the fact that in 1939 the B.A. or the B.Sc. in Arts was the goal of those who proposed to make a career of secondary school teaching; by 1944 these students (68 men and 92 women) were proceeding towards the degree of bachelor of education. The school of commerce also declined in numbers, from 96 in 1939-40 to 33 in 1944-45.

Of the professional faculties Agriculture was the only one whose numbers suffered a noticeable decline, from 154 in 1940-41 to 60 in 1944-45. Medicine, Dentistry and Applied Science continued to train students in numbers then regarded as very close to the maximum their staff and physical equipment could handle, although in the last years of the war it was apparent in medicine that the supply of students qualifying for admission was falling below normal and that a prolongation of the war might lead to a serious reduction either in the number of physicians trained or in the standard exacted. In Nursing and Household Economics, where only women students were enrolled, there was no significant decline. The degree course in Pharmacy showed an increase until 1941-42 and then a decline. In the B.Sc. in Arts, the number of men dropped off sharply between 1939 and 1944 (from 150 to 76) but less sharply than in the B.A. The number of women in this course, on the other hand, rose steadily during the war years.

Although these figures make no pretence to statistical significance (they should be accurate enough) and can therefore be regarded only as suggestive, they indicate a marked trend in the university away from the subjects and courses commonly regarded as cultural towards those which form the basis of the scientific professions, with the emphasis on those with a clear relation to the war effort. This was only to be expected but the figures for the first post-war year, 1945-46, suggest that although the other professional courses, Commerce, Law and Agriculture, have been able to recover more than their lost

ground, the number of students seeking an education rather than a training in professional technique has substantially declined.

Accelerated Courses

There was a widespread sentiment, not in the university only but among the general public, that under war conditions the equipment of the university and the time of staff and student alike should be more fully or more formally utilized than had been customary before 1939. The regular university term at Alberta extended from the end of September to the middle of May, leaving a vacation period broken by the six weeks summer session in July and August. The long vacation is not for the staff a vacation from work but, if they escape summer school teaching, only from the insistent demands of lectures, laboratories, weekly essays, term papers and examinations. The vacation is, to the teacher who takes his teaching seriously, a trust rather than a privilege, a season not of leisure but of freedom from interruption. It is as essential a part of university life as the class room, the library or the laboratory. For the student equally it is a period when, if he wishes, his mind may range more widely or more deeply than the discipline of university courses during term permits, when he can pursue new and fascinating byways of knowledge from which curricular exigencies debar him at other seasons. For the student the long vacation also offers the possibility of the paid employment that makes his university training possible. For the student in the professional course it presents an opportunity to gain helpful practical experience in his chosen field. Despite these uses of the long vacation, it seemed to some that, under conditions of national emergency, if the training of the student were of a value that justified his exemption from military service, the period over which that training was given might well be reduced by requiring him to train for more months out of the twelve than seven. It was rather more easily established that, in emergency conditions, university facilities should be used to the fullest possible extent and that libraries, lecture rooms, laboratories and residences should be utilized for as many days of the year as possible. The question of staff was more difficult for there seemed to be no reason to doubt that a good instructor would,

if worked continuously without the intellectual and physical refreshment of vacation, become progressively less effective as an instructor and that his contributions to scholarship and scientific progress would dwindle to nothing. Additional staff would solve this problem, but trained men were increasingly difficult to find at a time when universities were compelled to compete not merely with the armed services but with industry and with administration, which were showing an infinite capacity for expansion and an insatiable appetite for trained men and women of all kinds. Under these circumstances the advocates of a continuous university term could only suggest that the war would not last long enough to reduce the effectiveness of university instructors to zero.

Public sentiment as well as an eagerness to contribute their maximum to the war effort thus persuaded the universities to inquire into the possibilities of acceleration. At Alberta the University Survey Committee's interim report recommended an investigation of the possibilities of fuller operation and a special committee to consider the question was appointed by President Newton in February, 1942. Its terms of reference were broad for it was to consider not merely the question of wartime acceleration, but also the comparative merits of the three-term system and the quarter system, with a view to the possibility of adopting one of the latter to accommodate the large number of students expected after the war. Nothing more than an adverse report came of the proposals with regard to changes in the length of the term but the committee's study suggested that immediate acceleration was desirable in medicine, dentistry and education. The faculties of arts and science and of agriculture reported no demand for acceleration. Applied science, like other Canadian engineering schools, decided against acceleration in favour of special courses for enlisted personnel detailed to them from active service.

The demands of the war made it clear that Canada was faced, and would continue to be faced, by an acute shortage of doctors and dentists. The steady drainage of those available into the armed services was rapidly denuding the country, especially its rural areas, of essential services and it was plain that only heroic measures could prevent many areas from passing into the danger zone. In May 1941, the Alberta

Medical Faculty Council in line with discussions between medical deans and the Director General of Medical Services, decided to accelerate the fifth year of the medical course. Under the accelerated programme, these students began their final year on July 2, rather than at the end of September, while the internship period was reduced from twelve to eight months. This class was graduated in March, 1942. Clearly financial aid to some students would be required, as some had always depended on summer employment. The dominion government did not at this point feel able to give such aid, as some medical schools submitted rather large estimates of the assistance needed. In spite of this financial difficulty, a plan for a general acceleration in all years of Medicine and Dentistry was adopted, to take effect in June 1942. The academic year of eight months was retained and acceleration secured by shortening the long vacation to one month. The course which normally took five full years could thus be completed in considerably less than four, which meant not only that the urgently needed doctors and dentists could be produced at an earlier date but that substantially more could be trained in a given period using the same facilities and staff, provided of course that the staff survived.

Acceleration involved many problems not apparent at first sight. Medicine was already in the process of a change of curriculum from six medical years and one premedical year to five medical and two premedical and this had involved abnormally large classes and various special arrangements. The fact that other faculties did not accelerate, time table difficulties, the classroom and laboratory shortage which was already hampering the university, all complicated the change. The necessary financial help for the students was provided by grants and loans from the Kellogg Foundation amounting to \$10,100 and from the Dominion-Provincial Youth Training Grant, amounting to \$1850. This total of \$11,950 assisted 51 students in the various years, for the first accelerated year up to June 22, 1942. At this point the urgent need for doctors and dentists led the dominion government not only to grant deferment to junior medical and dental students but to permit students in the last two years to enlist with pay and subsistence allowance for a period up to 24 months while they completed their undergraduate course and internship. The gov-

ernment also contributed to the running expenses and extra costs of several medical schools. At Alberta the increased cost of teaching was slight as the full time teaching staff did the added work without extra pay and the small honorariums of the part-time clinical teachers were increased only by one half. This procedure was not followed in many other Canadian and American schools.

Seven medical and five dental classes were affected by acceleration. At the end of the acceleration scheme, October, 1946, 225 students had graduated in a period of five years. If the average medical graduating class is taken as twenty-seven this give a gain of ninety graduates.⁹ Two accelerated classes graduated after the close of hostilities but this was by no means loss, for it increased the number of doctors available for peace in a country where the needs of public health were before 1939 met, if they were met, by only the narrowest margin. To quote directly from Dr. Shaner's report: "From the standpoint of the military services there have been made available (up to May 1944) 116 candidates for medical commissions, 36 more than would have been normally available, and all of these have been prepared 6 months to one year earlier than normally expected. Such is the chief contribution of the medical faculty to the war effort, made at a cost that is probably less than the cost of training one air pilot."¹⁰ The remaining medical graduates, not needed for war service, were qualified from 16 to 23 months ahead of normal schedule. Similar results were achieved in the School of Dentistry which by 1941 had qualified 48 men and women, a gain of 13 over its normal output and a saving for individual students of from 4 to 16 months.

Acceleration in medicine and dentistry appeared to have served its purpose by the fall of 1943, when it began to seem unlikely that students entering first year at that time would be able to qualify before the end of the war. The supply of good prospective students was diminishing and it was difficult to find teachers for clinical courses. The Medical and Dental Faculty Councils, with the concurrence of the Minister of Defence, therefore voted to put the current first year classes

⁹This average is based on the number of graduates over the preceding twenty years and in view of the steady expansion of the university is probably too low.

¹⁰R. F. Shaner, "War Time Acceleration in the University of Alberta," p. 9. This is Professor Shaner's report as chairman of the committee on acceleration.

on a normal schedule but to continue acceleration for the other classes until graduation. The last accelerated class thus graduated in October, 1946. As a result of deceleration no medical students graduated in 1947, so that the net gain was very small. Between 1941 and 1947 there were 225 graduates. An average class of 36 over six years would have produced 216. But although the net gain was small, the time saved for each graduate of the accelerated courses was of considerable value to him and to the country.

Accelerated courses were also offered by the Faculty of Education in 1942 and 1943 with a view to meeting the emergency created by the enlistment of many high school teachers in the armed services. These courses were very much of an emergency nature and were given during the long vacation as a supplement to the usual summer session of the Faculty of Education. Reduced fees, grants-in-aid and relaxation of regulations with regard to prerequisites were offered to make the course as attractive as possible to those who, while not intending to enter the teaching profession permanently, might be willing to give this form of service during the war years. Thirty-two students were given temporary certification under this scheme for the year 1942-43 but only 13 students enrolled for the 1943 session and, as the Faculty of Education regarded as inadequate the training which it was possible to give, the accelerated sessions in Education were discontinued.

Service courses in the University

Apart from this effort to increase the number trained as doctors, dentists and teachers, special courses were given to various groups from the armed services. Army electricians, army cooks, air force radio mechanics, and navy electrical and radio artificers were among those who received special courses which made use of university instructors, university classroom and laboratory facilities and university living accommodation. In 1943-44, in accordance with a plan tried out in 1942, the Army selected a group of 60 young enlisted men for a one year course which was, with a few modifications, the university course in first year engineering. The university staff provided instruction and the members of the course were housed and fed in St. Stephen's College. In addition a very large number of service members enrolled in the courses

offered by the Canadian Legion Educational Service, for which the university's department of extension was responsible.

The first course given by the university to service groups was that for military electricians in 1939-40, under arrangements initiated by E. G. Cullwick, professor of Electrical Engineering, who was later concerned with electrical training in the Canadian navy. In June 1941 a much larger group of air force radio mechanics began training. To provide better facilities for a second class, the second story of the power plant building was remodelled. A third and last class was given training in 1942. Meanwhile courses had been begun for members of the Canadian navy, at first for electrical artificers and then for radio artificers. Naval personnel remained under training in the university until the end of 1944 and were accommodated in St. Joseph's College. Members of the university staff served as senior instructors and undergraduates as laboratory and tutorial assistants. Later the navy provided its own junior instructors, a much more satisfactory arrangement as it permitted laboratory instruction during the regular university session to be given in the daytime rather than in the evening. Liaison officers were appointed by the services concerned and co-operation was most happy. In all a total of 1229 completed service courses.

In no way did the university influence the lives of more service members than through the department of Extension, which, at the request of the Departments of National Defence and War Services, assumed responsibility for the organization of Canadian Legion Educational Services in Alberta. The courses offered were of two kinds, correspondence courses in all subjects up to the level of junior matriculation or in such non-curricular subjects as accounting, music, radio, mechanics and practical agriculture, and secondly, tutorial classes in the same subjects conducted in various navy, army and air force establishments in the province. The courses served, in the words of the director of the department, a dual purpose, to help the student become a more efficient fighting man, and to help him to help himself in the post-war period. In many cases these courses enabled air force ground crew with educational handicaps to remuster to aircrew. During the war years there were nearly 20,000 registrations recorded by this department of the university.

Health services to the armed forces

Apart from the large number of members of the staff who joined the medical services or the Canadian Army Dental Corps and the contribution made by the depleted staff to the accelerated courses in medicine and dentistry, the university rendered useful health services to the armed forces. These services were in large measure performed through the Provincial Laboratory of Public Health, which is housed in and operated by the university. Other university departments that rendered aid in this quarter included the department of Dairying, which helped service units to secure a wholesome supply of dairy products, particularly milk, the Industrial Laboratory, which made chemical analyses of water, milk and other foods, and the department of Biochemistry, which received the human blood collected by the Red Cross and separated and shipped serum to Toronto for processing. In addition the professor of Biochemistry acted as consultant to the nutritional laboratory established and operated on university premises by the air force.

The Provincial Laboratory of Public Health not only gave instruction and experience in serology and bacteriology to members of both Canadian and American services but in 1939, in conformity with a decision by the medical headquarters of the various services, assumed responsibility for certain types of laboratory work required by the services. These included tissue examinations and autopsies, differential blood counts and the examination of blood smears for malarial parasites, serological tests for syphilis, examination of smears for gonorrhoea, bacteriological culture work on throat swabs and material collected from wounds, body fluids, sputum, etc., bacteriological examinations of water, milk and other foods, Ascheim-Zondek tests and other less important forms of assistance such as the supply of media for the culture of bacteria in air. A member of the staff also made a large number of tests for blood grouping of air force personnel.

Work done for the forces in the provincial laboratory reached a peak in 1943, when 34,389 specimens from this source were examined out of a total of 115,013 dealt with by the staff. Until December, 1942, this work was done without any payment by the dominion government. As the require-

ments of civilian health imposed a steadily increasing load on the laboratory's staff and facilities, conditions in its always inadequate quarters in the basement of the east wing of the medical building became steadily more congested, until they were reported by the dean of medicine to be positively dangerous. Enlistment, the general unrest of wartime, changes to other essential war work and marriage of personnel all contributed to the difficulties of administration and in its report of 1942, the university survey committee described the provincial laboratory as "the most urgent problem in the whole University." An increase in staff dictated by the laboratory's expanding work only added to the difficulty of accommodation but it was not until after the end of the war that more commodious, although still temporary, quarters could be provided.

The university was also able during the war years to continue its peacetime policy of offering refresher courses to the members of the medical profession. During the war these attracted a large number of service medical officers stationed not only in Alberta but also in the other western provinces. Special attention was given to medical problems faced by the service officers who in 1943 and 1944 substantially predominated in the enrollment. Stress was laid on such tropical and subtropical diseases as malaria and dysentery and on epidemic diseases resulting from the redistribution of populations. The attention given parasitology and tropical medicine enabled the university to improve its instruction in these subjects, as members of the staff attended special courses in these subjects given elsewhere in connection with military medical training.

War Research in the University of Alberta

In common with other Canadian universities, Alberta made a dual contribution to war research. She produced men trained to carry on scientific investigation and at the same time members of her staff, often with student assistance, devoted themselves to research projects connected with the war. The universities indeed made a triple contribution on the scientific side, for while the emphasis was upon the training of research workers and upon projects directly related to war problems, the university scientists at the same time continued to work on the problems of what is sometimes called "pure" science, the necessary foundation of all the applications of man's know-

ledge to the solution of man's technical problems in war and peace alike.

The demand for trained engineers and scientists made by wartime necessities led to an increase of the enrollment in courses providing such training. The accelerated courses adopted in medicine and dentistry were not copied in applied or pure science, where it was felt that the special courses for enlisted personnel which have already been described,¹¹ would be a more useful contribution. Under war circumstances, the sciences were exceedingly attractive to prospective students, who found in the choice of the regular scientific courses a means of rendering effective war service. Government authorities shared this view and placed these courses among those "essential to the national interest" and "contributing to the prosecution of the war." The result was a heavier enrollment in scientific courses with an increased teaching burden on the scientific staff, who were obliged to assume heavy overtime loads and suffer severely curtailed vacations. Fortunately the Mobilization Board of National Selective Service and the Wartime Bureau of Technical Personnel co-operated by securing the assistance of suitably trained graduates and by granting postponements of military training to the younger members of the staff. It was thus possible for the university to graduate, during the war years, 300 in Engineering and 391 as B.Sc. in Arts. This compares with 274 in Engineering and 244 as B.Sc. in Arts in the years 1933-1939. Almost all these were absorbed into essential national services, where of course the many pre-war scientific graduates were already useful.

It cannot be too much emphasized that the universities made their contribution to the national war effort as much, and indeed more, in their peace time work as in the emergency conditions of war. The universities of Canada created the reservoir of trained men and women which existed in 1939 and without which Canada would have been completely helpless. That indispensable asset was made up of men and women who before 1939 had often had cause to feel that their country was not entirely conscious of their existence. Universities indeed should be able to sympathize with the complaints of the Haligonians, that it is only in war that they can expect a hearing from the rest of Canada.

¹¹See p. 22 ff.

War research at the University of Alberta began on a small scale in 1940 and by the summer of 1942 practically all research effort was directed to war problems. The department of Biochemistry co-operated with the Red Cross blood clinics in separating plasma from blood, and in the nutritional programme initiated by the R.C.A.F. which established a nutritional laboratory in one of the university laboratory buildings in 1943. The department of Chemistry was especially active, with about twenty research assistants in addition to the permanent members of the staff engaged in projects of high secrecy and importance carried out under the National Research Council, the Division of Explosives of the Department of National Defence and the Directorate of Chemical Warfare and Smoke. Among the subjects investigated, many in direct co-operation with the Field Experimental Station at Suffield, were war gases, smokes, detonators, high explosives, respirators and flame thrower fuels. A member of the department and his assistants, for example, investigated the fundamental properties of charcoal, with especial attention to the nature of its surface, in relation to its use in respirators. Another worked on the problem of thickening military smokes with a view to providing a medium which, on dispersal by aircraft, would provide a stable screen with a tendency to settle rather than rise. A third supervised fundamental studies of high explosives, war gases and poisons.

No account of research activities would be complete without mention of the distinguished work of the late Edward Herbert Boomer, who, in addition to supervising several war research projects in the university, acted as technical Western Adviser to the Allied War Supplies Corporation and was thus concerned with the construction and operation of ammonia plants at Trail, B.C., and Calgary. He was also called into consultation from time to time by the National Research Council in connection with the research programme on atomic energy with which a number of other Alberta graduates were concerned both in Canada and the United States. To the success of this programme, undoubtedly the outstanding contribution of science to the war effort, Dr. C. J. MacKenzie, President of the Research Council, has said that Dr. Boomer's contribution was immeasurable. His death in October, 1945, shortly after his return from a technical survey for the Cana-

dian government of German industrial plants manufacturing synthetic liquid fuels, was an irreparable loss not only to the university but to his country and to science. A tireless worker, totally unsparing of self, E. H. Boomer was as much one of the casualties of war as the other gallant members of the university who died further afield.

Members of the department of Civil Engineering contributed to the National Research Council's investigation in connection with that "Operation Habakkuk" which so mystified the inhabitants of Jasper and Lake Louise. The possibility of building huge ice ships to be used as floating airports in the North Atlantic for the protection of the vital convoys in that ocean was examined but dismissed when the situation in that area became less critical. Alberta's contribution consisted in the investigation of some of the properties of ice and some assistance in the design and testing of these iceberg carriers.

Work was also done in this department in the testing of arrestor hooks for carrier aircraft, in the low temperature impact tests on samples of cast steel, where information of value in gun manufacturing was acquired, in the testing and analysis of concrete and concrete materials in the construction of airports and other projects in Alberta and the Northwest, and in the testing of soils in these projects, with special reference to properties of frozen earth. A member of this department in collaboration with members of the Mathematics department carried out experimental work in the stability of liquid filled shells in flight.

With the aid of a powerful X-ray tube obtained through the National Research Council, the department of Physics equipped and operated a laboratory of industrial radiography, which permitted the testing of locally manufactured aluminium castings and other parts. The departments of Plant Science and Soils worked on the production of butylene glycol from grain in connection with the production of synthetic rubber.

The Research Council of Alberta, though a separate organization, is housed in the university and directed and largely manned by university staff. Under Dr. Boomer's direction, Council staff investigated the production of liquid fuel from natural gas, a project made important by the wartime shortage of gasoline. The Provincial Gasoline and Oil Testing Labora-

tory, which is under the jurisdiction of the Council, tested all R.C.A.F. samples submitted by airfields from Fort William to the west coast. The Council was also able to advise the Department of National Defence with regard to the use of solid fuels.

The University Buildings in Wartime

Wartime activities naturally strained the facilities of the already sufficiently cramped university, whose buildings had been far from adequate before the war. Crowded as the classrooms were, the situation was far worse in the library and particularly grave in the laboratories, for not only were the latter in demand for research and special courses, but the war brought a decided trend towards scientific studies. Equally serious was the pressure on living accommodation for students. No greater physical sacrifice was made by the university than its loan to the air force, as No. 4 I.T.S. (Initial Training School), of the three university residences, Pembina Hall, the women's residence, and Athabasca and Assiniboia Halls, residences for men. The University of Alberta, drawing a majority of its students from outside Edmonton, had by 1939 developed a strong residential tradition. Athabasca Hall was the first university building and for many graduates Athabasca Hall was the university. The three brick buildings, though not perhaps the most distinguished architecturally on the campus, were in a very real way the centre of university life. They did more than house out-of-town students. They provided quarters for a number of the staff, from the Provost down to junior instructors, the university medical service had its infirmary in Athabasca, university athletic activities centered in the two gymnasiums, social activities of all kinds in the dignified dining hall of Athabasca and the various lounges of Athabasca and Pembina. The House Committees were among the most vigorous of the various organs of student government. When the public was officially entertained, it was in Athabasca Hall, where the university's plate emerged, the brass and the floors shone more brightly than ever, the fires were lit and flowers appeared. Above all things the residences had a devoted staff, and a highly competent one, some of whom had served the university since its first days, when Athabasca had provided class rooms and residence,

laboratories and administrative offices all in one. The residences had their own social events, of which perhaps the Christmas banquet came nearest to the hearts of most who lived there, their own traditions, even their own language. It was this that the university gave up when, in 1941, the three buildings were turned over to the Commonwealth Air Training Scheme. This was the most serious physical adjustment the university had to make. There were compensations. A new cafeteria was built, a temporary infirmary went up, the university retained the gymnasiums for a time and in due course inherited the large drill-hall the airforce built to the west of St. Joseph's College, together with a lesser building the airforce used as a canteen but which was to serve the postwar university as a drawing laboratory for engineering students. The compensation paid was relatively small and the cost of re-decorating and refurnishing had to be met at inflated postwar rates, but this was not the sacrifice. The loss of the residences, temporary though it was, broke their tradition and although Reg. Lister, the head caretaker, remained as custodian of the mores during the occupation, even his vigorous personality could not entirely bridge the gap.

Although the university's facilities were strained by the war and although it was obvious that their inadequacy would impair the university's contribution to postwar readjustment, it proved impossible to carry out any sort of building programme during the war years and the university had to make shift as best it could. The new cafeteria and infirmary, and another temporary building which housed the university printing press, the machine shop and the department of Political Economy, were all useful but did not begin to fill the need. An anecdote in *The New Trail* effectively suggests that the overcrowding was not wholly a wartime phenomenon. "Dean Boyle twenty-one years ago (1922) drew up plans for the conversion of the space occupied (in the Arts Building) by the Print Shop to the uses of the Physics Department. A new building is now being raised behind the Medical Building to house the Print Shop; and your reporter the other day came upon Dr. Lang (of the department of Physics) poring over Dean Boyle's specifications . . ." The Edmonton Normal School became the Education Building when the university took over teacher training in 1944, but the building was not relinquished

by the air force until November 1945. The new faculty needed all the space in that commodious building, for it had to provide accommodation for a model school, where its students could have facilities for practice teaching. The Faculty of Medicine was affected by the increase in the bed capacity of the University Hospital to 700 beds by the opening by the Department of Veterans' Affairs of the Colonel Mewburn Pavilion, named in honour of the university's first professor of Surgery.

It was not until the war was over that the university could launch upon a building programme that at least promised something like adequate accommodation. A new nurses' home completed in 1947 releases half St. Stephen's College to accommodate men students, two new wings were in the same year in process of addition to the Medical Building, a beginning had been made on the new library. Meanwhile a good many temporary buildings, by-products of military surpluses, added, if not to the amenities of the campus, at least to the accommodation available for the greatly expanded student body. Both during the war and after, the university used its inadequate buildings to the limit and, it seemed to some, even beyond it. All sorts of strange contrivances were adopted to stretch its physical accommodations, contrivances that did not always produce precisely that atmosphere conducive to the quiet study that is the essence of the university method. Depression and war in succession made building impossible; each thus lessened the contribution the university might have made both to the war and the peace that came after.

The Students in Wartime

War transformed the life of the student as it transformed that of the university community at large. Deprived of the residences and living under what were often exceedingly uncomfortable conditions, carrying on his work in a badly overcrowded university, all in an atmosphere of uncertainty as to their own duty and the government's view of it, the student bore a heavy burden. In common with the staff and the country at large, the student found his leisure moments cut to a minimum and indeed, if he were to do all that it was held he ought to do, eliminated altogether. The demands of military training and the exigencies of a time table dictated by the scarcity of classroom and laboratory space filled his days and

nights. War regulations made some courses highly competitive and throughout the university failure carried with it new penalties. Under these circumstances extra-curricular activities suffered and many student organizations, some of them, like the Debating Society, of long standing in the university, temporarily disappeared. Interest in student government dwindled steadily until in 1942 even the important office of president of the students' union was filled by acclamation. In their moments of relaxation the student body preferred diversions less intellectual than those offered by many student organizations and as the loss of the residences involved the loss of the social life that had centered there, the students tended to withdraw, for the little leisure they had, from the university. The conversion of the university rink to military purposes left another gap that was only partially repaired when an open air rink was provided. Athletic activities naturally suffered from the competition of military training and in 1940 intercollegiate competition was cancelled as a result of a decision by the Universities' Conference. Protest from the students led to the restoration of competition between the western universities, and Alberta and Saskatchewan competed in rugby, basketball, boxing, wrestling and fencing. This reduction in intercollegiate competition coincided with a revival in interfaculty competition, regarded as highly desirable in that it meant that a much larger number of students actually played games. In 1941-42 an estimated 525 students took part in athletics. Early in the 1942-43 session the Students' Athletic Board voluntarily discontinued intercollegiate in favour of interfaculty competitions but the former were revived on a limited scale in the session of 1944-45. Wartime experience suggested the need for competent direction of athletics and for a developed programme of physical education and these were the subject of recommendations from committees representing the student body and other university groups.

The two major publications, the sometimes weekly, sometimes biweekly student newspaper "The Gateway" and the annual year book, "Evergreen and Gold," continued to appear although the latter found that printing difficulties rapidly increased. During the session 1940-41 a committee appointed by the Committee on Student Affairs made a study of "The Gateway," which had been the object of much criticism from both

staff and students. "The Gateway," in common with literary activities in general, suffered from the wartime preoccupations of the students and from the steady decline in the numbers in the faculties of Arts and Law. In 1943 as a result of the decline of student interest and a ruling of the University War Services Board two traditional university functions, the Spring Play and the annual performance of the Philharmonic Society were dropped. Other activities, including the University Mixed Chorus, took their place. One of the least happy of these experiments was the "Talent Night" or "Varsity Show," which received much adverse criticism. The Interyear Play Competition continued through the war years and provided theatrical experience for a good many students.

The Staff in Wartime

If the university's physical equipment was strained during the war years, an equally heavy pressure was put upon its staff, both academic and administrative. The numbers of the academic staff, full time as well as part time, show an increase over the prewar total in spite of the number who were given leave of absence for war service but if the figures for full-time staff members in the rank of assistant professor or above are considered, it is apparent that actually a decrease occurred between 1940 and 1943, which was, however, more than made up after the latter date.¹² The fact that an apparent increase in staff accompanied an increased strain on the staff, in spite of a decrease in enrollment, may in part be explained by the fact that war conditions forced the appointment of men and women of less experience and lower qualifications who were consequently unable to carry as heavy loads as might normally be expected of junior members. Research, military training, service courses, the increasingly serious overcrowding and contributions to the war effort not directly connected with the university, rather than any decrease in staff numbers, help to explain the sense of strain under which the staff laboured during the war years. Such a sense of strain was the product of a war atmosphere that affected civilian life in Canada at large. Under these circumstances it is not surprising that those who continued to bear the academic burden in wartime were inclined to envy those who escaped to what was in appearance the less tedious life of the services.

¹²See Table III, Academic Staff Numbers, 1938-46.

A fairly large proportion of the academic staff resigned or were given leave of absence to join the armed services or to accept positions directly connected with the war. During 1944-45, 13 members of the full-time academic staff and 26 members of the part-time staff were on leave of absence, out of a total of 331. In the first year the Faculty of Medicine was particularly hard hit, for it lost six of its members, including its dean, Allan C. Rankin, who became Director of Hygiene Services C.A.S.F. in Canada, Lt. Col. R. T. Washburn, Superintendent of the University Hospital, who went to the command of No. 4 Casualty Clearing Station, and Miss Agnes Macleod, Director of the School of Nursing, who joined the army nursing service. Medicine continued to suffer this drain from its teaching staff and in view of the heavy commitments undertaken with regard to the accelerated courses, was perhaps the faculty most seriously affected. Robert David Sinclair, Dean of Agriculture, was "lent" to the government for a period during the fall of 1943 to serve on the United Nations Interim Commission on Food and Agriculture. Earlier in the same year the late George Malcolm Smith, Dean of Arts and Science, was given leave of absence for work with the Department of National Defence.

War conditions made it difficult to replace those members of the staff who died or retired during the period. The well-loved dean of Agriculture, Ernest Albert Howes, died in 1940 and was succeeded by Dr. Robert Newton, a former head of the Department of Field Crops who had been Director of the Division of Agriculture and Biology in the National Research Council and was to become fourth president of the university. The death of Leighton Carling Conn, Professor of Obstetrics and Gynaecology, in December, 1941, was a serious loss to the Faculty of Medicine. On June 3, 1942, there occurred the untimely death of James Alexander Weir, Dean of the Faculty of Law. No other faculty owed to any single man what Law owed to Dean Weir, whose intellectual distinction and selfless devotion had been so largely responsible for its high status. Just before the opening of the session of 1942-43 a tragic accident deprived the Faculty of Applied Science of the high abilities of Harry Randall Webb, Associate Professor of Civil Engineering. A further loss to this faculty came with the death in November, 1943, of Wilfred Ernest Cornish, Associate

Professor of Electrical Engineering and acting head of his department. Retirements and resignations also took their toll of those who had rendered long and arduous service. The retirement in 1940 of Cecil Scott Burgess, Professor of Architecture coincided with a decision to discontinue the granting of degrees in this study. Dr. H. E. Bulyea, Director of the School of Dentistry, retired in 1942 and was succeeded by Dr. W. Scott Hamilton. Miss Florence E. Dodd, Adviser to Women Students and J. W. Shipley, Professor of Chemistry retired on April 30, 1942, and on the same date C. A. Robb, Professor of Mechanical Engineering and F. A. S. Dunn, Professor of Pharmacy, resigned. In August, 1945, just after the end of the war, several members of the staff long associated with the university retired: Allan Coats Rankin, first Dean of Medicine, and first Professor of Bacteriology and Hygiene; Egerton Llewellyn Pope, first Professor of Medicine and Director of Medical Services; Norman Charles Pitcher, first Professor of Mining Engineering, and John Malcolm MacEachran, first Professor of Philosophy, first Provost of the university, and last of the little band of men who under the leadership of Dr. Tory had been the university's pioneer faculty. These men, having all served with distinction as heads of their respective departments, were appointed by the Board of Governors to be Professors Emeritus. At the same time Miss Jessie Montgomery, first Extension Librarian, Harry Alexander Gilchrist, first Professor of Prosthetic Dentistry and Evan Greene, for twenty-five years Professor of Anatomy, also retired.

Changes in the University Administration

Important changes in the administration of the university took place in the war years. The Honourable Alexander Cameron Rutherford, first premier of the province and the author of the act establishing the university, of which he had been chancellor since 1927, died on June 11, 1941. He was succeeded by the Honourable Mr. Justice Frank Ford. Chancellor Rutherford's long association with the university was symbolic of his keen and fruitful interest in education in the province. He was, with President Tory, chief among its founders, and his consistent support, in and out of government and legislature, had contributed largely to the direction it had taken.

In 1940 the Chief Justice of the province, the Honourable Horace Harvey, was replaced as chairman of the Board of Governors by Harold Hayward Parlee, a prominent Edmonton lawyer who was later elevated to the bench. At the same time John Edward Annand Macleod, the Honourable Harry William Lunney and Mrs. Violet McCully Barss were succeeded on the Board by John Burns, a Calgary business man, the nephew of the well-known Pat Burns, pioneer of the Alberta meat packing industry, John Francis Percival, the deputy provincial treasurer and George Douglas Stanley, a Calgary physician, long interested in educational matters and a prominent Conservative. The new appointments were unexceptionable but public and press, quick to suspect political interference in the affairs of the university, showed a disposition to believe that all was not well in relations between the university's administration and the government which provided the major part of its support. The excitement soon died down but its generation was perhaps a healthy sign that the public was alert to any pressure on the university, no matter how little grounds there might be for its suspicions.

Another incident in 1941 marred relations between government and the university. A custom had grown up of conferring the degree of Doctor of Laws on prominent citizens, including members of the provincial government, and the university, following the traditional usage, might not have expected the outburst which followed the proposal in the Senate to present to Convocation for this degree the premier of the province, the late Honourable William Aberhart. The Senate by a majority of one voted against the proposal and the university was placed in a most embarrassing position. Had no publicity attended either the proposal or the Senate vote, the incident would have had little importance but unfortunately the episode attracted wide attention. The Social Credit government was bitterly opposed in some quarters and the granting of the degree to the premier had long been a subject of speculation. The Senate vote put the university in the humiliating position of offering a gratuitous insult to the leader of the government elected by a majority of the people. The President and the Chairman of the Board of Governors offered their resignations, which were not accepted, a new speaker was pressed into delivering the Convocation Address

that it was now scarcely possible for the premier to give, and in the convocation of 1941 and for five years thereafter no honorary degrees were awarded.

The University Survey Committee

This disagreeable incident revealed the danger of political intrusions into the life of the university and made it apparent that, in the existing state of its constitution, one at least of its governing bodies, the Senate, might be used for political purposes. There was a widespread feeling within and without the university that the University Act required modification and that the university might profit from a thorough review not only of its constitution but of its relation to the community it serves. Accordingly the Lieutenant Governor in Council under O.C. 1117/41 appointed a committee to conduct such a survey. The committee was under the chairmanship of H. H. Parlee, Chairman of the Board of Governors, and included the Acting President of the university, Robert Newton, who had succeeded President Kerr when the latter retired on September 1, 1941, and who was confirmed in the office of president the following spring. The other members of the committee were G. Fred McNally, the deputy minister of education, H. C. Newland, the superintendent of schools, F. G. Winspear, the professor of Accounting and the late John W. Barnett, the secretary of the Alberta Teachers' Association. The committee began its meetings on September 12, 1941, and made an interim report to the Lieutenant Governor in Council on January 20, 1942.¹³ It received a number of submissions from University bodies and officers and from various organizations and individuals outside the university. The latter submissions, twenty-nine in number, came from various professional organizations, sundry groups with a special concern with education, such as the Alberta School Trustees' Association, the Alberta Teachers' Association and the University Women's Club and from other bodies as diverse as an insurance company and the Associated Temperance Forces of Alberta. This wide response suggests the concern that the general public felt for the welfare of the university and its eagerness to make it serve as wide a range of interests as possible. In addition to

¹³The Interim Report of the University of Alberta Survey Committee to the Lieutenant Governor in Council was tabled in the Alberta Legislative Assembly, February 25, 1942, and printed as Sessional Paper No. 50 of 1942.

the receipt of written submissions public hearings were held in Edmonton on November 12 and 13, 1941, at which those who wished to do so were invited to make written or oral submissions or to discuss written submissions previously presented. Press notice was given of willingness to hold public hearings in Calgary, but the response did not warrant such a proceeding.

The terms of reference under the order in council were wide and subcommittees were set up to study: "(a) the University Act, (b) organization and administration, (c) finance, (d) curriculum, (e) staff, (f) research." The committee as a whole inquired into "(a) the place of the University in the educational system of the Province, (b) whether the University can be made to serve more completely the cultural needs of all the people of the Province, (c) whether it is possible to have the University function more effectively in the development of the agricultural and industrial resources of the Province."

The Committee made recommendations on a large number of subjects, many of which were later carried out. Some of its recommendations dealt with matters of detail that could be changed by the existing machinery of university administration, by the decision of a faculty council or the adoption of a new departmental policy. Others involved changes in the existing machinery and therefore a revision of the University Act by the provincial legislature. Still others, and these were perhaps the most important and indeed involved many of the recommendations in the first and second categories, were conditional upon an increase in university revenues. Such substantial increases as would be demanded by some of the proposals could be secured in one or all of three ways, by a larger grant from the province, by private gift, or by levying heavier student fees. All these methods of obtaining additional funds were touched on by the Committee.

Of the first category of recommendations, one or two instances may be given. The Survey Committee's first recommendation with regard to the university's place in the educational system was "that opportunity be provided for students to obtain at the University the third unit of a foreign language (that is, the third secondary school unit) and the second units of mathematics and another science, rather than include

these in general matriculation requirements." Such a recommendation is understandable under the educational circumstances that obtain in Alberta, where in rural and small urban high schools it is difficult to teach all the subjects required by university matriculation requirements as well as the still wider range permitted to those who do not expect to proceed beyond the secondary level. To meet the situation the Faculty of Arts and Sciences in 1942 recommended to the General Faculty Council that, beginning in 1943, the University offer courses at the Grade XII level in mathematics, the sciences and the languages, but made it plain that admission without complete matriculation might mean an additional year beyond the time normally required for a degree or diploma.

Reference has already been made to the examination of the possibilities of a change in the length of term to permit the fuller use of the university's facilities not only in wartime but in the period immediately following, when a very much increased demand for university training was quite correctly anticipated.¹⁴ The committee recommended the exploration of the feasibility of the quarter-term system but the results of the exploration were not encouraging and the committee on year-round schedules appointed by the president under the chairmanship of R. F. Shaner, the professor of Anatomy, recommended instead lengthening of the existing undergraduate year to about twenty-eight weeks exclusive of spring final examinations, its division into semesters, the development of the summer school and, ultimately, the institution of a double summer session. A special session extending from January to August, and a full summer term beginning in May, were both conducted in 1946 for first-year students discharged from the services too late to enter in the fall of 1945, but no other action has yet been taken on these recommendations.

The Faculty of Education and teacher training

The influence of three members of the Committee closely connected with the teaching profession, Messrs. McNally, Newland and Barnett, was noticeable throughout the report and many of its recommendations reflect concern with the future of teacher-training in the province and the integration of the university and the high school system. Of these re-

¹⁴See p. 18 ff.

commendations the most important and the most fruitful was "That the College of Education be given faculty status forthwith, with provision for accommodating different groups of students in courses of various lengths, and with provision for training teachers in the industrial arts, commerce, and household economics." This recommendation was further supported and somewhat elaborated by the interim report of the provincial Post-war Reconstruction Committee, which agreed that all teacher training in the province should be conducted by the university's Faculty of Education. A step in this direction was taken during the summer of 1944 when the Summer School formerly conducted separately by the Department of Education was combined with the University's Summer Session. On April 1, 1945 the university assumed full responsibility for the training of the teachers of the province. The permanent members of the staff of the two provincial Normal Schools became members of the Faculty of Education, which thus increased from three to twenty-six. When the former Edmonton Normal School building, at the southern extremity of the campus, was released by the Department of National Defence, it provided welcome space for a Faculty most inconveniently housed in cramped quarters in St. Joseph's College.

The University of Alberta, in common with some others, has for many years been responsible for the training of high school teachers, but it is the first Canadian university to be given sole responsibility for the training of all teachers. The scheme reduced to its simplest form provides that every teacher in the province will have completed or be in the process of taking four years of university training, with two years of basic teacher training included in a four-year programme leading to the degree of Bachelor of Education. The new plan had many critics, ranging from those who deplored it as unnecessarily long and elaborate to those who feared that it might submerge the high traditions of liberal education and the Faculty of Arts under a tide of courses in pedagogical method. To others it seemed the greatest opportunity to exert a profound influence in the life of the province that the university has ever been afforded. In the past the university's graduates who remained in the province have been massed in the cities and the larger towns. The university-trained teacher, like the doctor and the lawyer, found his way almost

invariably to the larger centres. But the future student from the university's Faculty of Education will be everywhere, in the rural one-room school of the economically least favoured region in the province as well as in the class-rooms of the high schools of its most prosperous city. It is true that the less highly trained student still in the process of obtaining his degree may, almost certainly will, gravitate towards the schools commonly regarded as less desirable, but from the university's point of view, as well as from that of the province, the new scheme ensures that he has been in touch with what the university has to offer. He will, or at least should, be a channel through which the reciprocal influence of the province and the university may flow. If the university is to be a centre of leading and light, here is its opportunity.

To what extent was this revolutionary development the product of the war? The improvement of the professional status of the teacher was a most pressing need in the eyes not only of the teachers themselves but of all who concerned themselves with education. That this status had been declining rather than rising ever since the early thirties was obvious to all thoughtful people of the province, for the progressive lowering of salaries during the depression had driven many of the best men and women out of teaching and reduced those who remained to an economic level quite out of relation to the specialized training and high attainment that were recognized as desirable. Teaching, in spite of the devotion of many able and gifted men and women who remained in the class-room in spite of the sacrifice involved, was ceasing to be an occupation that could attract the best of the graduates of the provincial high schools, not to mention those of the university. The war produced even more rapid deterioration in the situation. The services claimed many and indeed offered better pay and living conditions than the average teacher could expect. The labour shortage also provided an opportunity for teachers to escape from their hardships into relatively remunerative and often more stimulating work. Under these conditions, in Alberta as elsewhere, a serious shortage of teachers developed in spite of every effort by government to cope with the emergency. Under pressure of the shortage the financial position of the teacher began to improve and by the end of the war the teachers of the province were in a

position at least comparable to that which had been theirs in the 1920's.

To hold this gain it was desirable that the teachers of the province should attain a standard of training that would enable them to take in the life of the community the place their function demanded. To this end the new integration of teacher training with its vision of a highly trained and broadly educated teaching body was perhaps the most important step. Whether it could have been undertaken, at least as early as it was, except under the conditions produced by the full exploitation of national capacities involved by war, must remain a matter of speculation. Certainly the ardent efforts of many teachers and others concerned with education should not be discounted. But war conditions were very favourable to a development that was one of the most revolutionary of the period not only for the university but also for the province at large.

The University Act 1942

An important section of the Survey Committee's report set forth the changes it proposed in the University Act, changes which were embodied in the new Act passed by the provincial legislature in 1942. The Act of 1942 indeed incorporated the substance of all the recommendations of the Survey Committee.¹⁵ These dealt largely with the constitution of the university's governing bodies and their relation to the university and to one another. The Board of Governors, in their view, should be the controlling body of the university and be composed of the President, the Chancellor, three representatives of the Alumni, including the President and Vice-President of the Alumni Association, the Deputy Provincial Treasurer, the Deputy Minister of Education, a Chairman and seven other members, appointed by the Lieutenant Governor in Council, no appointed member to hold office for more than six years. The Act, as passed, limited alumni representation to the two senior officers of the Association, and also reduced the appointed members to the chairman and six others.

The Senate, the Committee held, should be reduced in number from fifty-four to twenty-five. This less unwieldy body should include eighteen statutory members, representing

¹⁵Cap. 4, Statutes of Alberta, 1942, now R.S.A. 1942, cap. 179.

the Board of Governors, the affiliated institutions, the teaching staff, the alumni and the students. The remaining seven should be selected by the Senate itself to represent agriculture, business, labour, industry, the professions, and provincial organizations devoted to social and cultural welfare. Of these latter, styled "appointed members," none should hold office for more than four years. So constituted the Senate could, in the phrase of the report, serve as "a bridge or link between the life and activities of the Province and those of the University." The Senate should be relieved of its responsibilities with regard to the granting of degrees in course and other purely academic matters and these turned over to General Faculty Council and various Faculty Councils, upon whose recommendations the Senate had in the past normally acted. Honorary degrees were to remain within the Senate's province. The Senate should act as a sounding board for provincial opinion, and provide a forum for debate of university policy in its widest sense and a means of transmitting the views there enunciated to the governing bodies of the university.

The Act as passed in 1942 reduced the number of statutory members of the Senate to sixteen, by cutting the representation of the Alumni and the General Faculty Council to two each. The appointed members, now nine in number, were allowed two terms of three years each.

The General Faculty Council, made up of the senior academic staff, should, the Commission recommended, inherit the purely academic functions of the Senate. The representatives of the professional societies in the existing Senate should become members of the appropriate Faculty Councils, where their special knowledge and experience could be brought to bear directly upon the detailed problems involved in professional training. The committee also recommended the formal organization of the Deans' Council, which up to this point had had no statutory authority or clearly defined duties. The growth of the university made the constitution of such an academic "executive council" a necessity and the Committee accordingly recommended that it should be given statutory authority among other things to advise the President in academic matters and to act as an executive body for the general faculty council.

A new appointment recommended by the Committee was that of an assistant to the president who would "directly represent the President in the business affairs of the institution" and who might, if it were thought advisable, bear the title of Vice-President. Such an appointment would do something to relieve the President from concern with the multitude of detail inseparable from the administration of a growing university and leave him free to discharge the higher functions of his office. Provision was made in the University Act for an appointment of this kind and in 1942 the office of Executive Assistant to the President was established.

These changes in the administrative organization of the university were the most important made by the new act. A minor change of some interest was the omission, in conformity with the Committee's recommendation, of the long inoperative provision of the earlier act that fifty percent of the succession duties levied by the province be paid to the university.

On only two points did the Survey Committee fail to attain complete unanimity in its recommendation. One was the constitution of the Board of Governors, and the method of appointment of the President, in connection with which F. G. Winspear submitted a minority report. The other was in connection with the committee's recommendation regarding the political freedom of members of the staff. Two members of the Committee, John W. Barnett and H. C. Newland, while concurring in the Committee's feeling that "the Board of Governors ought not in the future to pass general regulations restricting the political activities of members of the staff" submitted a minority report recommending that the majority's feeling should be given statutory force. The matter was one which had long caused a mild agitation in university and provincial circles generally and stemmed from a regulation passed by the Board of Governors in 1935 restraining members of the staff from participation in provincial politics or standing for election to the federal house. Although the majority of the Committee did not approve the minority's view that statutory precautions should be taken, it did include the recommendation "that the maximum possible amount of political freedom be accorded to members of the staff" and in December, 1942, the motion of January, 1935, was rescinded by the Board of Governors.

The Building Programme

Many of the Committee's recommendations, and a great many more of the proposals made in the submissions to it, involved considerable expenditures. The largest were those that would be required by the ten-year building plan which the Committee advised. No new major buildings had been added to the university's plant since the opening of the Medical Building in 1921 and in twenty years the student population had doubled. With the anticipated increase in enrollment after the war the university, already suffering seriously from overcrowding, would find itself in a virtually impossible position. Among the most pressing needs appeared to be more adequate library facilities, increased space for medicine and dentistry, space for a department of chemical engineering, an addition to the University Hospital to improve its clinical facilities and room for the Provincial Laboratory. These were only the most urgent, for every department and every student felt the pinch and would be at least a little relieved by any increase in accommodations. To meet these needs, the Committee proposed a million dollar expenditure over the ten years following 1942 on the building of the east and centre wings of the Medical Building, a new wing at the University Hospital, a Biological Science Building, a Chemical Engineering Building, and a Nurses' Home at the Hospital, to be constructed in the order given. It was not possible to launch the building programme as soon as the Committee had hoped and unfortunately little could be done before the end of the war. At the time of writing, more than five years after the Committee made its recommendations, the Mewburn Pavilion at the University Hospital and the Nurses' Home have been completed, two wings of the Medical Building are under construction and a beginning has been made on a library, which was not included as a separate building in the ten year plan but which had long been one of the serious needs. These are in addition to a number of temporary buildings erected on the campus to meet the postwar emergency. The permanent buildings that have been and are to be erected are of a very much superior construction to that envisaged by the Ten Year Plan, which was necessarily influenced by the difficulty of building in wartime and by the natural expectation that the government might be reluctant to commit itself to too costly a programme in a period

of such uncertainty. Those who regret that extra space was not available to meet the rush of students in the immediate postwar period may find consolation in the thought that in the future the university will be very much better housed than in the past and that so far the accommodation crisis has been met, if not comfortably, at least without disaster.

New departments and faculties

The briefs submitted to the Committee and the Committee's report alike called attention to many possibilities for expansion and reorganization in the faculties and departments of the university. There were a good many changes during the war years, some of them natural developments, some stimulated by the war and some almost in the nature of direct results of the conflict. During the period two new Faculties were organized, Education and Dentistry, both growing out of pre-war schools. One department of instruction, Architecture, ceased to exist. Among the new departments organized were Fine Arts and Chemical Engineering, while the departments of Animal Husbandry, Poultry and Veterinary Science were merged into Animal Science, and Field Crops and Horticulture were combined as Plant Science. In both cases the larger departments were expected to offer improved facilities for research and a more intimate consultation between men working in similar fields. Other minor changes in departmental organization of an administrative nature involved the disappearance of the department of drawing and descriptive geometry, whose work was merged in that of the department of civil and municipal engineering. The department of general literature and culture, which drew its instructors from the literary departments and had no staff of its own, ceased to exist. The department of the history of agriculture was another casualty.

Of all these changes the most important was perhaps the emergence of Education as a fully fledged faculty, charged with the training of all teachers in the province, a development already discussed.

Architecture was discontinued after Professor Burgess' retirement in 1939. There were only three students expecting to graduate in 1940 and none in 1941 and as excellent schools of architecture existed at Manitoba, Toronto and McGill, the Board considered continuation at Alberta unjustified.

The problem presented by the School of Dentistry was rather different. It was the only Dental School west of Toronto and the war had revealed very sharply the country's shortage of men trained in this profession. Dental training, like medical training, is expensive and although there was no shortage of students, the School was crowded beyond endurance, its clinical facilities were inadequate and its equipment was rapidly deteriorating. To maintain a first class dental school and to meet the growing needs of the dental profession for postgraduate training would require a substantial increase in university expenditure. Dr. H. Bulyea, Director of the School, retired in 1942 after twenty-two years of service and was succeeded by Dr. W. Scott Hamilton. The latter inherited from his predecessor all the old problems while the acceleration of dental courses put an additional strain on the resources of the school. The Alberta Dental Association was keenly interested in the programme of expansion and improvement for the school and urged it vigorously upon the University. The Survey Committee, although not dealing in detail with dental education in its report, placed its claim for additional support before the government and included provision for its better accommodation in its ten year building plan. In 1944, learning that the other western universities had no intention of establishing dental schools, the Board of Governors on July 10 approved the organization of Dentistry as a Faculty with Dr. Hamilton as its dean. As in the case of Education a natural development, long impeded by lack of funds, had been stimulated and hastened by the war's emphasis of a need that existed quite independently of the war itself.

The organization of a department of Chemical Engineering, with the emphasis on petroleum engineering, had long been under consideration and received a high priority among the recommendations of the Survey Committee. The appropriateness of such a department in the university of a province possessing extensive actual and potential petroleum resources needed little demonstration and a wide public interest in such a department existed, especially in the south of the province, where a not inconsiderable number of young men found themselves obliged to go to the United States if they wished to study the professional exploitation of what was held to be one of the major resources of their native region. The situation

with regard to the establishment of such a department at Alberta was rendered peculiarly favourable by the presence on the staff of the university of the late E. H. Boomer, one of the most eminent Canadian authorities on the subject and a man much interested in the encouragement of its study. His contributions to the war effort have been mentioned elsewhere; the research carried on under his supervision naturally added weight to the demand for the recognition of his subject. New courses in Chemical Engineering were approved by the Board of Governors in December, 1942, the Department of Chemical Engineering was organized and Dr. Boomer was appointed as its head.

The origins of the Department of Fine Arts in the work of the Department of Extension went far back into the history of the university and the establishment of such a department was advocated by a number of the submissions to the Survey Committee although not recommended in its report. The Committee felt that such a department would be desirable but it held as one of its general principles that new departments should not be established until existing departments were more adequately housed, equipped and staffed, unless help were forthcoming from outside sources. Such help had in the past been very substantial, coming largely from the Carnegie and Rockefeller Foundations, whose generosity had made possible important developments in the cultural side of the work of the Department of Extension. Members of the university as individuals had always been active in the artistic, dramatic and musical life especially of Edmonton but also of the province at large and students had always found some opportunity to develop this aspect of their education at the university. Particular mention might here be made of the exhibits of pictures that it had long been the custom to make in the upper lobby of the Arts Building, through which a majority of students, most of the staff and a large proportion of the visiting public had occasion to pass. The catholicity of these exhibits, arranged by the efforts of members of the staff, particularly Professor Burgess and Professor Keeping, sometimes disturbed the more conventional of those who viewed them but they could scarcely fail to be an educative influence.

Although a number of courses in the Faculty of Arts in classics, history and modern languages and literature by their

very nature gave attention to the philosophy and history of the fine arts, their actual practice was still outside the scope of university instruction. Advanced training in the fine arts was offered by the Provincial Institute of Technology and Art at Calgary and the department of extension had before the war instituted work in the province at large along these lines. Out of this grew a most important phase of the university's work, the Banff School of Fine Arts.

The Banff School of Fine Arts

The Banff School grew out of a summer school in the arts related to the theatre established in Banff in 1933 as part of a programme in the fine arts financed by a grant from the Carnegie Corporation of New York. Alberta as a province had shown a considerable interest in drama, amateur theatres existed in many communities and the summer school was a great success, with 130 students instead of the forty regarded as a minimum for successful operation. The school was repeated in 1934 and in 1935 an art class sponsored by the Provincial Institute of Technology and Art accepted an invitation to join with the students of the theatre, a master class in piano was introduced and the school was christened the Banff School of Fine Arts. In 1937 the school began to offer courses in choral singing and creative writing and the enrolment reached 195, with students coming from many provinces of Canada and from the United States. So promising was the development that in 1935 the Carnegie Corporation renewed its supporting grant for two additional years. In 1940 an Oral French section was added to train high school teachers. An Applied Art division established in 1941 offered courses in weaving and design, modelling and pottery. In 1943 the Western Canada Theatre Conference was established to bring together "the leaders of little theatres and community drama groups with the students to discuss common problems." Out of the Alberta Writers' Conference established in 1944 has grown the Western Canada Writers' Conference.

The Banff School grew steadily through the war years until by 1945, 427 students attended and 100 had to be turned away because of lack of accommodation. In 1937 a start was made in organizing temporary living accommodations and by 1946 some 58 buildings were under contract to the school for

the six week period. In 1940 the Banff School Board, aided by the University and the Canadian Pacific Railway through a gift to the university by the late Sir Edward Beatty, built an auditorium to replace the old building previously in use, which had been destroyed by fire. From 1944 forward the School, in spite of its low tuition fees, was nearly self-supporting as far as its current operations were concerned. It had also been able to award a number of tuition scholarships, aided here by private individuals, service clubs, school boards and the French government.

Encouraged by a record of such unbroken success, and conscious of the large part the Banff Summer School had come to play not only in the cultural life of Alberta but also of Canada, the university by the end of the war was able to look forward to further developments. Plans were made for permanent buildings, extension of the school's facilities and for ultimate year-round operation. As demands by other services of the university upon government funds were already heavy, the university appealed to private individuals and organizations for endowments and established a separate trust to receive all donations.

The success of the Banff School and the requirements of the newly organized Faculty of Education indicated a need for a further expansion of the university's role in the cultural life of the province to include work in the fine arts at the university level. A foundation had already been laid by the university's work in drama and although the Department of Fine Arts was not established until after the war, its courses in music, drama and art were a natural sequel to the work done, largely by the department of extension, during the war years.

The University radio station

Another phase of the work of the Department of Extension, its operation of the university radio station, had a rather chequered history. Built in 1927 by the department of Electrical Engineering, the station was by the outbreak of war in serious need of thorough rehabilitation. It had established a sound reputation as an educational broadcasting station but its coverage was inadequate and reception of its programmes was not entirely satisfactory. In the fall of 1940 the government came to the rescue, approved the university's proposals

and provided funds for the erection of a new station. However, although the new station was built, the federal Department of Transport refused to grant the university a commercial license and it was thus impossible for the station to become, as had been hoped, self-supporting. In April, 1944, the station was turned over to the provincial Department of Telephones, with the university retaining its full privileges as far as educational broadcasting was concerned. To deal with the latter, a Radio Secretary and a Radio Committee were appointed and the university, relieved of the responsibility for the operation and management of the station, was still able to make full use of its facilities for university programmes. The Department of Transport maintained its refusal to grant a commercial licence even after the transfer of the station but this did not prevent the Department of Telephones, with its superior technical and larger financial resources, from operating the station non-commercially, a state of affairs not altogether unpleasing to a fairly large audience which found in the constant intrusion of advertising material in the programmes of other stations a certain tedium.

The Alberta Folklore Project

During the war years the university through the Department of Extension made a further contribution to the cultural life of Alberta in the Alberta Folklore, Local History and Creative Writing Project, financed under a grant from the Rockefeller Foundation and directed by Robert Gard from 1943 to 1945. Mr. Gard was succeeded by Philip Godsell, who acted as director until the end of the three-year term of the Project. The purpose of the project was to stimulate interest in, to preserve and to record the past of the province, in order that a knowledge of that past might not be lost but form a sound basis for a regional culture. There was an enthusiastic response, a substantial collection of Alberta materials was brought together and six numbers of an "Alberta Folklore Quarterly" were published between March, 1945 and June, 1946. When the term of the project expired, no organized body appeared to take over the work it had been doing. It was perhaps in a sense a war casualty, for the many preoccupations of war and of the immediate postwar period prevented the sinking of roots that might have anchored it deeper in the

life of the province. Nevertheless, the Project may be held to have served its purpose, for it did collect and record a great deal of folklore and historical materials that might otherwise have been lost, and it caused some of the people of Alberta to look at least briefly at their heritage of legend and story.

The New Trail

If the university had something to say to the world it needed a medium beyond the class-room, the lecture hall, the learned journal and even beyond the radio. It needed a periodical publication, a journal of opinion that not only its graduates but the world at large could read with interest and with profit. In such periodicals Canada is, compared with the riches of other countries, woefully poor. Of the few she has, most emanate from the universities, the majority from the universities of the east. The Alumni Association had long had a publication, "The Trail," consisting largely of personal notes on the whereabouts of graduates of various classes. "The Trail" had by 1940 fallen on evil days for the Alumni Association of a university with over 4000 graduates had been able to collect only sixty dollars in fees and was therefore unable to pay for the printing of its official publication. The university came to the rescue, but this crisis in the affairs of "The Trail" was only one evidence of the shocking indifference of the graduates to the university and its welfare. The Survey Committee in its report had stressed the need for a greater sense of responsibility for and loyalty to the university on the part of the alumni and had made several suggestions, including the appointment of a full time Alumni Secretary. This latter recommendation was not carried out until after the war but in December, 1942, the Board of Governors approved the assumption by the university of joint responsibility with the Alumni Association for the publication of "The New Trail." Such a quarterly had been recommended by the Alumni Association in its brief to the Survey Committee. Under the energetic and imaginative editorship of F. M. Salter of the department of English, "The New Trail" rapidly assumed a place of honour among university publications.¹⁶ It continued to include the material previously published in its smaller pre-

¹⁶Professor Salter resigned as Editor after the appointment of a full-time Alumni Secretary who assumed the editorship.

decessor but it also gave space to a number of articles of wider interest, by students, staff and graduates as well as by writers outside the immediate university community.

A feature of "The New Trail," or rather one of its offspring that is worth special mention, was "The Chipmunk." This was a mimeographed weekly newsletter from the Campus to the University Overseas, inspired by the "Weekly News Letter" founded by William Muir Edwards and edited by W. H. Alexander during the war of 1914-1918. The first "Chipmunk" appeared in March, 1945, from the pen of R. K. Gordon, professor of English, the second was largely the work of Reg. Lister, familiar to generations of Alberta students as the dynamic head caretaker of the university residences and later numbers were contributed by other members of the university. Nearly a thousand of these newsletters at first went overseas; when the thirteenth and last was mailed, only fifty were required. The enterprise, in which R. K. Gordon and E. W. Sheldon were the prime movers, with F. M. Salter assuming the heavy burden of editorial responsibility, won an appreciative response from the service men and women who received it. Professor Rowan's eponymous chipmunk, who decorated the letterhead, was adopted by "The New Trail" to head its remarks on university happenings, a cheerful reminder that even in the grim events that led to his first appearance a letter is a friendly thing.

University organizations and the university overseas

"The Chipmunk" was only one of many ways in which during the war years the university community sought to remind its members in the services that they were not forgotten. For a time "The Gateway," the student publication, was mailed to students in the services but the burden of postage was heavy and, service addresses and postal facilities being what they were, this had to be discontinued. The War Contact Fund and the War Workers Fund, both supported by the students, provided various comforts for members of the university on active service. The Students' Union made grants to the Red Cross Prisoners-of-War Fund. In 1941-42 the student body raised \$2,788.87 towards contributing an ambulance to the army and in the following session raised \$2,000.00 in a Mobile Canteen Drive. In 1943-44 they raised

a further \$1,500.00 to purchase a skin therapy unit for the Colonel Mewburn Wing of the University Hospital. The Dental Undergraduate Society collected about 2,000 magazines to send to the armed forces overseas. Students also contributed generously to the Alumni Cigarette Fund, established early in the war as a link with the university overseas. In 1940 and 1941 Christmas cakes as well were included, baked by the Wauneita War Workers¹⁷ under the supervision of the School of Household Economics, but sugar rationing and the disappearance of the coffee tin prevented the continuance of this pleasant reminder of a homelier world.

The maintenance by university groups of this association with the members of the university in the services was accompanied by a quickening of alumni interest in their university. The latter may indeed have been in part a consequence of the former for these efforts connected with the university presented a means by which those at home could symbolize their unity with those abroad. Thus the university, serving as a link and a channel of communication, came more concretely into the minds of those it had helped to mold. For those in the services, many of whom entered directly from the university, that institution was invested with the peculiar radiance that meant home. To the thoughtful public generally, the war gave a new demonstration of the vital place of the university in society, not only in the conduct of the war but in the conservation of those dreams of men which must survive if war is not to be entirely futile. In this atmosphere the revival of alumni interest was to be expected and this revival the university and its administration were quick to recognize and facilitate. The efforts of the Alumni Association to preserve a link with its members overseas, "The New Trail" and its offspring "The Chipmunk," the increased representation of alumni in the governing bodies of the university, the decision to appoint a full time Alumni Secretary, were all milestones on the way to a new relation between the university and the great majority of its members, graduates and former students. This quickening of interest on the part of the alumni led to a reorganization of the Alumni Association in 1940 and the establishment of several new branches and the reestablish-

¹⁷The Wauneita Society is the official organization of the women undergraduates of the University of Alberta.

ment of others, some outside the province, testimony to the universality of education, others in Alberta communities like Two Hills where the appearance of such an organization suggested the profound and intimate influence the university could wield in the province to which it gives its primary service.

The Friends of the University

Although it is upon the support of its alumni that a university must always place its first reliance, any university, and especially a state supported university, must look also to a wider public. The movement to provide a means by which this wider public could signalize its interest was a spontaneous one, but the immediate success of the Friends of the University, an organization open to persons willing to subscribe five dollars or more a year, owed much to the fertile mind and persuasive pen of F. M. Salter. The purpose of the Friends of the University was to provide a special fund to make possible all kinds of extra undertakings which would enrich the quality of teaching at the university. Since its inception in 1943 the Friends of the university have made possible the purchase of such books as Saccardo's "Sylloge Fungorum . . .," invaluable to mycologists but beyond the means of any university department;¹⁸ their contributions have helped to further the preparation of a projected manual of Alberta flora, to build up a special Shakespeare library, to purchase costly and much needed microscopes and to provide assistance to many deserving students. One form that the latter took was the Young Writers' Fund which helps to pay expenses involved in securing publication of the work of young writers, with the understanding that if success comes, they will repay the fund.

Gifts to the University

The quickening of interest in the university and its work and the general prosperity of the war years brought a substantial increase in the gifts that made possible an expansion of the university's activities and added largely to its amenities. Among them were many valuable accessions to the library, all

¹⁸In a history devoted to the war years, it is perhaps permissible to note that it was the war that made this book, exceedingly rare and virtually unobtainable, available when the United States Custodian of Alien Property permitted the reproduction of many alien publications, including Saccardo's. The book was reproduced by the U.S. Bureau of Plant Industry by photographic offprint at \$200.00 a copy.

of them welcome but none more so than the generous gift of the late Lt. Col. J. H. Woods of Calgary, which was to be used to establish a collection of books in the university library dealing with the relations of Canada and the United States. Throughout the years students past and present added to the extensive collections of the Department of Geology. Reference has already been made to the grants from the Rockefeller Foundation and the Carnegie Corporation which made possible such activities of the Department of Extension as the Banff School of Fine Arts and the Alberta Folklore Project. Other gifts made to permit work in drama helped to lay further foundations for a department of Fine Arts. The W. H. Kellogg Foundation gave assistance to medical and dental students in accelerated courses. The late Cyril G. Wates in 1943 presented the university with a twelve and one half inch reflecting telescope, which, by means of a grant from a Carnegie Corporation Fund already in hand, was housed in a small observatory, one of the few additions to the campus buildings during the war years. Many government agencies, various associations, a number of business organizations and private individuals were among other donors. Through their generosity the university was able, between 1938 and 1947, to increase the number of scholarships, bursaries and prizes from about 100 to more than 160; and their value from about \$5,500 to more than \$25,000.¹⁹ Although these gifts did not begin to create for Alberta an endowment equal to that of older institutions their marked increase in a relatively short period suggests a growing public awareness of the importance of higher education. The increase in prizes was little more than two-fold, but the amount available in bursaries and scholarships was multiplied nearly five times during the period of less than ten years.

The postwar University

The story of the university's war years would be incomplete without reference to its sequel, the tale of the university's contribution to the postwar programme of veteran rehabilitation. As President Newton said in his report of 1945,²⁰ "V-

¹⁹These figures, based on the lists in the University's Calendar, do not include medals, prizes and bursaries or scholarships of unstated value or number, or scholarships and prizes awarded in competition with students of other universities or tenable elsewhere. The University Honour Prizes, Tegler and University Matriculation Scholarships and the Rhodes Scholarships are a few among those thus excluded.

²⁰Report of the Board of Governors and the President of the University of Alberta, 1944-45.

Day in Europe was really D-Day in Canada." His remark was peculiarly applicable to the universities, which were cast for an important role in the training for civilian life of the returned men and women. The university community had been aware from the outbreak of war that victorious peace would make the heaviest possible demands upon the university's resources and from the autumn of 1941 forward the federal government committed itself to the support of a programme that would bring university training within the grasp of those veterans who desired it and could meet its requirements. This policy, at first rather nebulous, became more clear-cut as the years passed but the universities, conscious though they were of the approaching emergencies, found it difficult to proceed with developments that were clearly urgent but exceedingly difficult to initiate under war conditions.

In common with most of her sister institutions in Canada, the university of Alberta was, even in 1939, seriously overcrowded and to some extent understaffed. The demands of war made the overcrowding even more acute, in spite of the relatively static enrollment, and created new staff problems. Under these circumstances the prospect of an unparalleled influx of students could be met only by the most heroic measures. A building programme such as that recommended by the survey committee would have gone some way towards relieving the anticipated congestion but war conditions made even that rather limited relief impracticable. Among the alternatives explored were double-shift operation and year-round operation but the results of these were discouraging. The department of defence gave assistance as far as staff was concerned by giving the universities a certain priority in the release of former and potential instructors but the supply fell far below the demand. Six years of war had taken its toll of those who would in peace have been training themselves for university teaching, many of those who had graduate training felt themselves to be rusty and desired at least a brief refreshment before they returned to or entered teaching posts and business, industry and government service offered brisk competition to the universities.

At Alberta as elsewhere it proved difficult to forecast the precise shape of events and most prophets were confounded.

Few expected quite the deluge of veterans that descended upon the university when the term began in September, 1945. Certain practical steps were taken in 1944-45, when the first veterans, only 34 in number, appeared on the campus. E. H. Strickland, professor of Entomology and a veteran of both wars, was appointed Director of Rehabilitation Courses and began to lay plans for the admission of veterans in January, May and September, instead of September only. The late D. E. Cameron, for so long the wisest of counsellors to students, staff, graduates and a large number of the general public, acted as adviser to veterans, and in the summer of 1945 gave up his duties as librarian to devote himself entirely to this work until his retirement in 1946.

The expected crisis came with the opening of the first post-war term in September, 1945. By October 9, with registration still incomplete, 2,527 undergraduates and 86 graduate students had been admitted. The total registration for that year, which included an extra session for veterans beginning in January and the summer session of 1945, was 4,811 as compared with the previous record of 1944-45, 2,679, and the prewar maximum of 2,175 in 1938-39. One hundred and fifty qualified civilians were asked to defer their university work and of the extra students 1,461 were veterans.²¹ For this "battle of the bulge," as the president so aptly termed it, the university was certainly not physically prepared but miracles were performed. Although the renovation of the residences was not complete, living accommodation was found, thanks in part to the generous response of Edmonton householders and in part to such expedients as the temporary use of the University rink as emergency accommodation. Class rooms and laboratories were equally inadequate although the university was using the former Normal School, the old Garneau High School and the air force canteen, which was enlarged to provide class-room space. The drill hall built by the R.C.A.F. for No. 4 I.T.S. served as a gymnasium. Teaching schedules ran from eight in the morning until ten at night and in 1946-47 timetables omitted the customary lunch hour. In that year the registration reached the new record of 5,927 but by that time the temporary accommodations provided by the erection of huts

²¹As late as May, 1945, a forecast of from 350 to 700 veterans had been considered daring.

had increased, if they had not improved, the facilities of the university, and if the situation was no better, it was not noticeably worse. Meanwhile the university had launched the programme of permanent buildings already mentioned.

It would be incorrect to say that the University of Alberta has survived its postwar crisis with its standards unimpaired but it would be equally incorrect to suggest that those standards have met irreparable disaster. Concessions with regard to matriculation requirements made to veterans were outweighed by the diligence and enthusiasm of those so admitted. The overcrowding and the exacting timetable had their compensation in the quality of the student. The most serious loss was in the close personal relationship that used to be possible between the teacher and the taught. For that, there can in the educative process be no adequate compensation. But it is doubtful whether in any academic society that essence of the university can be wholly and permanently destroyed.

Service record of members of the University

So far in this record of the university's war years, no mention has been made of the individual achievements of those of its members who joined the various armed services. The university cannot, even if she would, claim those very personal triumphs as the fruit of her discipline. No one, however skilled in educational measurement, can assess the relation between education and heroism or even between education and duty well done. But the university can believe, and indeed must, that her efforts sometimes helped. And she can take pride in the names of the men and women that are here set forth.

THE FALLEN

"Their Name Liveth for Evermore"

Vladimir Adamic
Aubrey Abram Adams
Gordon Forbes Alger
Joseph Cletus Allen
Richard Henry Appleyard
Arthur Campbell Archibald
Walter Gray Arnold
Charles Oren Baker
George Raymond Baker
Alex Addington Ballachey
Gilbert Thompson Blair
Richard Gustav Briese
John Bright
Wilfred Henry Brooks
Albert E. Brosseau
William Wood Lindsay Brown
Douglas John Alex Buchanan
William Gledstones Bury
Richard Laurence Callaway
Wilfred Lawrie Cameron
John Sommerville Cardell
Earl John Christie
Fenner Hugh Clark
Bennett Winthrop Clarke
James Constabaris
Leroy Duncan Coons
Bruce Sherwood Corbett
Norman Edward Costigan
John Walter Dallamore
Harry Kenneth Davies
Richard John Secord Dawson
Francis Irving Dewar
Frederick Sayre Dewis
John Edmund Diamond
Roderick Joseph Digney
Arle Breton Douglas
Glenn Richard Dunn
Joseph C. Dwyer
Norman Douglas Edmond
George Albert England
Robert Clive Felstead
Kenneth Gordon Fenske
John Frederick Filteau
Rowan Purdon Fitzgerald
Vincent Bernard Fleming
Thomas Rex Forsyth
Robert Charles Foster
Robert Ross Gammon
Irving Walter Garfin

Joseph Leon Gibault
Robert Finlay Gibson
John Arthur Gerald Gordon
Robert Graham
Robert H. Gray
Thomas Farrell Greenhalgh
Harold Gulbraa
Stanley Mervyn Heard
John Anthony Heffernan
William George Henry
William Clifford Hewson
Lloyd G. Hinch
Hugh Munro Hope
Joseph Arthur Horsfall
Richard MacBain Howey
Arthur Francis G. Hughes
John Hurlburt
Walter Lloyd Hutton
Thomas Vincent Hyland
Earl Clifford Ireland
Harry Charles Irvine
Frederick Hansell Irwin
Robert Aubrey Irwin
William Thomas Johnstone
Wm. Edward Wellington King
Harry Nettleton Kirkland
Douglas Stanley S. Kirkwood
William Ward Knapp
Andrew Lennox
Robert Lepsoe Jr.
John Lloyd Lewis
Walter Carlyle Little
Robert Fraser Logie
Leslie Duncan McAllister
James Archibald McCormick
Donald Patton McDaniel
Alan Stuart MacDonald
Charles George MacDonald
George Lloyd McDonald
Ian Batty Macdonald
Verdun Frederick McDonald
Alan James McEwen
Thomas Wilson MacKenzie
John Goodsir Mackid
William Lidstone McKnight
William Mark McLaughlin
James Robert McLean
Donald Robert McNabb
Hugh Douglas MacPherson

Thomas John Magee
Jacob Barney Mandel
Neil Douglas Medhurst
Hugh Merryweather
John Whitla Millar
William Anderson Millar
Kenneth William Moodie
Joseph Evan Morgan
James Roy Munn
Gordon Chapman Munro
W. James Murdoch Nickerson
Archie Thomas Noble
Nick E. Nykiforuk
Edmund W. Burton O'Meara
Donald Moir Palethorpe
Alexander Granton Patrick
William Andrew Payne
Francis Lionel Peters
Hunter Pfrimmer
John Marshall Polomark
Richard C. Procter
Robert Lanning Procter
Gordon Henry Pybus
Joseph Coates Redmond
George Joseph Reid
William Archibald Reid
Ian Crichton Robbie
John Milne Roberts
Donald Kenneth Robertson

Wilbert James Robertson
William Garland Roxburgh
Robert Allen Scott
William A. Semeniuk
William Stuart Sewall
Robert Smith Shanks
Douglas Haig Sharpe
Hance Logan Shortliffe
Bonn Cory Smith
Ivan Winston Smith
Richard Clare Smith
John Rutherford Sterne
Kenneth Roger Sutton
John Rodger Talbot
Norman Allin Terwillegar
Edward Craig Thomas
Robert Aubrey Thorne
Cyril Nisbet Tingle
Charles Travers
Harry Uretzky
Wm. Alexander Walkinshaw
Humphrey Stanley Watts
James Arthur Whiston
Laurence Hughes Wilkinson
David Gabb Williams
John Henry Wilson
Patrick Henry Woodruff
George C. Yavis
Alan Wilmot Young

AWARDS

VICTORIA CROSS

Lieutenant Robert Hampton Gray, RCNVR, Arts 1937; Nov., 1945 (posthumous award).

COMMANDER OF THE ORDER OF THE BRITISH EMPIRE

Brigadier Henry Grattan Nolan, M.C., K.C., Cdn. Army, B.A. 1914; January, 1946.

Brigadier William Smith Ziegler, D.S.O., E.D., Cdn. Army, Applied Science 1935-39; December, 1945.

DISTINGUISHED SERVICE ORDER

Lieutenant Colonel Albert Frank Coffin, RCAC, Phm. 1932; 1945.

Lieutenant Colonel Archie Scott Donald, C.I.C., Arts 1927; Nov., 1943.

Lieutenant Colonel John Robert Blakely Jones, OBE, RCE, B.Sc. (M) 1935; June, 1945.

Major William Alexander Milroy, CIC, Commerce 1938-40; Nov., 1945.

Major Douglas Haig McIndoe, RCAC, B.A. 1939; June, 1945.

Major Bruce Fraser Macdonald, CIC, B.Com. 1940; June, 1945.

Lieutenant Colonel A. D. MacPherson, RCAMC, M.D. 1929; April, 1945.

Major Leonard Vincent McGurran, CIC, B.Com. 1939.

Wing Commander Patrick Henry Woodruff, RCAF, Diploma Phm. 1935; 1945.

Brigadier William Smith Ziegler, C.B.E., E.D., Cdn. Army, Applied Science 1935-39; July, 1944.

OFFICER OF THE ORDER OF THE BRITISH EMPIRE

Lieutenant Colonel Eric Wyld Cormack, E.D., RCA, B.Ss. 1925; Jan., 1945.

Group Captain Ralph Cargill Davis, RCAF, B.Sc. (C) 1934; Jan., 1946.

Major Harold Lancelot Hurdle, RCCS., B.Sc. (E) 1933; August, 1944.

Lieutenant Colonel John Robert Blakely Jones, D.S.O., RCE, B.Sc. (M) 1935; March, 1945.

Major Alan Fraser Macdonald, C.Int.C. B.A. 1936, LL.B. 1937; Aug., 1944.

Air Commodore Walter Alyn Orr, RCAF, B.Sc. (E) 1932; June, 1943.

Lieutenant Colonel Arthur Hood Warr, RCA, Pharm. 1939; Dec., 1945.

Brigadier Ernest Brown Wilson, E.D., Cdn. Army, B.A. 1925, LL.B. 1927; June, 1944.

MEMBER OF THE ORDER OF THE BRITISH EMPIRE

Major Ronald Fraser Bowman, RCE, B.Sc. (A) 1928; March, 1945.

Major Gaylord Frederick Arthur Brink, RCE, B.Sc. (M) 1936.

Major Donald Forbes Cameron, RCAC, Medicine 1938-41; August, 1944.

Major Clarence S. Campbell, RCA, B.A. 1924, LL.B. 1926; June, 1945.

Colonel Ernest Adolphe Côté, Cdn. Army, LL.B. 1938.

Major Charles Michael Devaney, CIC, App. Sc. 1933-35; Sept., 1945.

A/Major Thomas Alfred Gander, RCAMC, M.D., 1940; Sept., 1945.

Colonel Eric Leon Gibbs, Cdn. Army, B.A. 1931, LL.B. 1932; June, 1944.

Flight Lieutenant Richmond Francis Lionel Hanna, RCAF, B.A. 1941; Dec., 1945.

Major Dennis McNeice Healy, C.Int.C., B.A. 1931; July, 1945.

Major Harold Sanford Hodgins, RCA, Arts 1930, Ed. 1940; July, 1945.

Major John Templeton Hugill, RCA, B.Sc. 1939, M.Sc. 1940; June, 1945.
 Wing Commander James Biggar Lawrie, RCAF, B.Sc. (A) 1926; Jan., 1946.
 Captain Andrew Welsh Lees, RCE, B.Sc. 1938; 1945.
 Captain John Robert MacKenzie, RCASC, App. Sc. 1939-41; Dec., 1945.
 Captain Gordon Carlyle Sweet, RCAMC, Diploma in Phm. 1940; Dec., 1945.
 Lieutenant Commander Frederick Balmer Watt, RCNVR, Arts; Jan., 1946.
 Captain Clarence Edward White, RCE, B.A. 1924, B.Sc. (M) 1927; 1945.

MEMBER ROYAL RED CROSS

Major Agnes Jean Macleod, RCAMC, B.A. 1924, B.Sc. (N) 1927; June, 1943.

DISTINGUISHED SERVICE CROSS

Lieutenant Robert Hampton Gray, V.C., RCNVR, Arts 1937; 1945.

MILITARY CROSS

Major Douglas John Burke, RCAC, App. Sc. 1933-38.
 Major Kenneth Andrew Connel Clarke, RCAMC, B.Sc. (A) 1938, M.D. 1940; Jan., 1945.
 Major John Alpine Dougan, CIC, B.A. 1942; Nov. 1943 (and Bar Jan., 1945).
 Lieutenant Albert Hanson, CIC, B.Sc. (M) 1941; Dec., 1944.
 Captain William Sydney Huckvale, RCAMC, B.A. 1931, M.D. 1935.
 Lieutenant Colonel Lorenzo Vance Macdonald, RCAMC, M.D. 1935.
 Captain Ernest Morgan Keith Macgregor, CIC, App. Sc. 1941-42; Dec., 1944.
 Captain Allan Douglas McKenzie, RCAMC, M.D. 1942.
 Lieutenant Alexander Hamilton Nicolson, RCE, B.A. 1936; Dec., 1944.
 Captain Martin Orrel Rollefson, RCE, B.Sc. (C) 1941; Dec., 1944.
 Major Henry Dolphin Patrick Tighe, CIC, Arts and Law 1935-36; Sept., 1943.
 Lieutenant William Bentley Tobey, RCE, B.Sc. (M) 1941; Nov., 1945.

DISTINGUISHED FLYING CROSS

Flying Officer Douglas John Alexander Buchanan, RCAF, App. Sc. 1939-40; Sept., 1943.
 Flying Officer Gordon Ralph Burton, RCAF, Arts 1938-39; Jan., 1944.
 Flying Officer Robert John Clark, RCAF, App. Sc. 1937-40.
 Flying Officer Charles Scott Henry Campbell, RCAF, B.A. 1941-42; Nov., 1945.
 Squadron Leader William Fraser Edwards, RCAF, B.A. 1942; 1944 (and Bar Sept., 1945).
 Wing Commander William Donovan Ferris, RCAF, App. Sc. 1930-31; May, 1943.
 Flying Officer Frank Hamilton Fish Jr., RCAF, App. Sc. 1941-42; Feb., 1945.
 Wing Commander David Thomas French, RCAF, B.Sc. (Ag) 1940; May, 1944.
 Flight Lieutenant Keith S. Goodman, RCAF, Admin. Staff; Aug., 1945.
 Flying Officer Meldrum Wells Little, RCAF, Arts-Med. 1941-43; April, 1946.
 Squadron Leader Harold Stanley Lisson, RCAF, Arts 1939; April, 1944.
 Flight Lieutenant John Goodsir Mackid, RAF, App. Sc. 1932-34; March, 1942.
 Flying Officer Jack James McIntyre, RCAF, B.A. 1934; July, 1945.
 Flight Lieutenant Joseph Gilbert Middlemass, RCAF, Arts and Dent. 1936-39; April, 1945.

Flight Lieutenant Rodney Thirsk Phipps, RCAF, App. Sc. 1938-40; Nov., 1943.
 Flying Officer Hugh C. Redmond, RCAF, Arts and Med. 1941-42; Nov., 1944.
 Flying Officer Albert Herbert Russell, RCAF, App. Sc. 1936-39; Jan., 1944.
 Pilot Officer Arthur Mitchell Scott, RCAF, Admin. Staff; Nov., 1944.
 Flying Officer Henry Bradshaw Stelfox, RCAF, B.Sc. (Ag.) 1942; Nov., 1945.
 Flight Lieutenant Haughton Gimby Thompson, RCAF, B.Com. 1938; May, 1945.
 Flying Officer Thomas George Tustin, RCAF, App. Sc. 1938-42; June, 1945.
 Wing Commander William Charles Van Camp, RCAF, B.A. 1938; Jan., 1944.
 Flight Lieutenant Gerald Einer Wilson, RCAF, App. Sc. 1941-42; 1945.
 Wing Commander Patrick Henry Woodruff, RCAF, Diploma Phm. 1935; Feb., 1945.
 Flight Lieutenant Frank Xavier Vernneau, RCAF, Arts 1941-42; Nov., 1944.

AIR FORCE CROSS

Flight Lieutenant Ronald Frederick Bedford, RCAF, Admin. Staff; Jan., 1943.
 Flight Lieutenant Norman Edward Greenaway, RCAF, App. Sc. 1938; Feb., 1946.
 Flying Officer J. McIntosh Hope, RCAF, Arts and Law 1940; Aug., 1945.

ASSOCIATE ROYAL RED CROSS (Second Class)

Lieutenant Queena May Esdale, RCAMC, Nursing Diploma 1930; June, 1943.
 Flight Lieutenant Elizabeth Rebecca Farquharson, RCAF, Nursing Diploma 1936; June, 1943.
 Captain Matron Nettie G. Garfield, RCAMC, B.Sc. (N) 1938; Dec., 1945.
 Lieutenant Nursing Sister Mary Loggin Poyntz, RCAMC, Nursing Diploma 1931; June, 1945.

GEORGE MEDAL

Lieutenant Colonel Douglas Scott Harkness, RCA, B.A. 1924; Feb., 1944.

BRITISH EMPIRE MEDAL

Captain Alexander Stewart Findlater, Cdn. Army, App. Sc. 1939.
 Sergeant David Morris Wolochow, RCAF, Agriculture 1935-38; June, 1944.

MENTIONED IN DISPATCHES

Lieutenant Gordon Alexander Allen, RCE, B.Sc. (M) 1939; 1945.
 Lieutenant George Edgar Allin, RCNVR, Arts 1940-41; March, 1945.
 Captain Jack Wilfred Bailey, RCE, B.Sc. (Chem.) 1941; Oct., 1945.
 Captain Robert Edward Bell, RCAMC, M.D. 1942; Oct., 1945.
 Major Howard Judson Bishop, CIC, B.A. 1939; LL.B. 1940.
 Flight Lieutenant Stuart Murray Bolton, RCAF, B.Sc. (E3) 1940.
 Major Donald Forbes Cameron, M.B.E., RCAC, Med. 1938-41; March, 1946.
 Lieutenant Stanley Cameron, RCE, B.A. 1940.
 Lieutenant (L) Donald Walter Clarke, RCNVR, B.Sc. (A) 1941, M.Sc. 1943; July, 1945.
 Major Kenneth Andrew Connal Clarke, M.C., RCAMC, B.Sc. (A) 1939, M.D. 1940; Feb., 1945.

Lieutenant John Harper Corbett, RCNVRV, B.A. 1941, LL.B. 142; March, 1945.
 Captain Patrick Gerald Costigan, RCAMC, B.A. 1938, M.D. 1943; July, 1945.
 Colonel Ernest Adolphe Coté, M.B.E., Cdn. Army, LL.B. 1938; Dec., 1944.
 Wing Commander Eric Duggan, RCAF, Com. 1925; June, 1945.
 Flying Officer Robert Douglas Dunlop, RCAF, App. Sc. 1940-42; Dec., 1945.
 Squadron Leader Hubert J. Esch, RCAF, App. Sc. 1935-36; Jan., 1946.
 Captain Alexander Stewart Findlater, B.E.M., RCOC, App. Sc. 1939; June, 1945.
 Major Harvey William Fish, RCAMC, B.A. 1932, M.D. 1936; 1945.
 Robert Godfrey Gibson, RCAF, B.Com. 1936.
 Flight Lieutenant Joseph Lloyd Greer, RCAF, B.A. 1939; 1945.
 Flight Lieutenant Richmond Francis Lionel Hanna, M.B.E., RCAF, B.A. 1941; Dec., 1944.
 Major Samuel Hanson, RCAMC, M.D. 1938; Feb., 1946.
 Captain Donald McCormick Jacquest, B.Com. 1941; April, 1946.
 Flight Lieutenant Jonas Christian Jonason, RCAF, B.A. 1928, M.A. 1940; Jan., 1946.
 Lieutenant Colonel John Robert Blakely Jones, O.B.E., D.S.O., RCE, B.Sc. (M) 1935; March, 1945.
 Lieutenant Norman Alexander, RCE, B.Sc. (Civil) 1941; Oct., 1945.
 Captain Andrew Welsh Lees, M.B.E., RCE, B.Sc. (Chem.) 1938; 1945.
 Captain David Edwin Lewis, RCASC, B.A. 1940, LL.B. 1941; Jan., 1945.
 Lieutenant Lorenzo Vance Macdonald, RCAMC, M.D. 1935.
 Captain John Robert MacKenzie, M.B.E., RCASC, App. Sc. 1939/141; June, 1944.
 Captain Alexander Havelock MacLennan, RCAMC, B.Sc. (A) 1928, M.D. 1932; Oct., 1945.
 Coder Hugh Merryweather, RCNVR, Arts 1940-41; Jan., 1944 (posthumous award).
 Lieutenant William George Morrow, RCNVR, B.A. 1938, LL.B. 1939; Jan., 1946.
 Leading Air Craftsman Harlin Kenneth Newinger, RCAF, B.Com. 1939; June, 1945.
 Captain Thomas R. O'Donnell, RCA, Arts 1936, LL.B. 1937; April, 1945.
 Captain Terence Oldford, CIC, Agriculture 1939-41; March, 1945.
 Air Commodore Walter Alyn Orr, O.B.E., RCAF, B.Sc. (E) 1932; June, 1945.
 A/Major Cecil Leslie Pearson, RCAMC, M.D. 1938; June, 1945.
 Lieutenant Peter Naismith Pitcher, RCE, B.Sc. (M) 1933; April, 1945.
 Captain William Alexander Reed, RCAMC, Medicine 1934-38; Sept., 1945.
 Captain Robert Whitla Ross, CIC, B.Com. 1941; March, 1945.
 Flight Lieutenant George Richards Shipley, RCAF, App. Sc. 1939-40; Jan., 1945.
 Brigadier Ernest Brown Wilson, O.B.E., E.D., RCA, B.A. 1925, LL.B. 1927; Sept., 1945.

CROIX DE GUERRE AVEC ÉTOILE D'ARGENT

Captain Robert Whitla Ross, CIC, B.Com. 1941; April, 1945.

ORDER OF ORANGE NASSAU WITH SWORDS

Lieutenant Colonel Eric Wyld Cormack, O.B.E., E.D., RCA, B.Sc. 1925; Dec., 1945.
 Major Charles Devaney, M.B.E., CIC, App. Sc. 1933-35; Sept., 1946.

Captain Donald Malcolm McDonald, Cdn. Army, B.Sc. (A) 1941; 1945.
Brigadier William Smith Ziegler, C.B.E., D.S.O., E.D., Cdn. Army, App.
Sc. 1935-39; Dec., 1945.

UNITED STATES SILVER STAR

Major Stanley Charles Waters, Special Service Force, Agriculture 1939-41; Feb., 1945.

UNITED STATES BRONZE STAR

M/Sergeant Nicholas Holowaychuk, USAAC, B.Sc. (Ag.) 1929, M.Sc. 1931; Jan., 1945.

BRONZE STAR MEDAL

Major Francis Severin Johnson, USAAC, B.Sc. (A) 1940; July, 1945.

ARMY COMMENDATION RIBBON (U.S.)

Major W. Allen Conroy, M.Cc., AUS, M.D. 1936.

LEGION OF MERIT MEDAL

Chief Warrant Officer John Milton Brown, USAAF, B.A. 1937; 1945.

Captain Llyd Barner Graham, CIC, B.A. 1942; 1945.

Group Captain William Fielding Hanna, RCAF, B.Sc. 1922, M.Sc. 1923; July, 1946.

GENERAL MONTGOMERY CERTIFICATE FOR GALLANTRY

Major Harvey William Fish, RCAMC, B.A. 1932, M.D. 1936; April, 1945.

GENERAL MONTGOMERY CERTIFICATE FOR GOOD SERVICE

Captain Peter Chariton Voloshin, M.D. 1941; Dec., 1945.

TABLE I.
REGISTRATION
UNIVERSITY OF ALBERTA

Year	Total	Year	Total
1908-09	45	1928-29	1501
1909-10	103	1929-30	1560
1910-11	129	1930-31	1790
1911-12	185	1931-32	1938
1912-13	333	1932-33	1965
1913-14	434	1933-34	1775
1914-15	439	1934-35	1811
1915-16	418	1935-36	1985
1916-17	305	1936-37	2069
1917-18	336	1937-38	2096
1918-19	*18	1938-39	2175
1919-20	1106	1939-40	2327
1920-21	1106	1940-41	2254
1921-22	1285	1941-42	2045
1922-23	1314	1942-43	2113*
1923-24	1341	1943-44	2023
1924-25	1354	1944-45	2679
1925-26	1302	1945-46	4811
1926-27	1298	1946-47	5927
1927-28	1536		

*This includes two sessions of Medicine and Dentistry.

TABLE II.
THE WAR AND STUDENT ENROLLMENT

	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46
M-W	M-W	M-W	M-W	M-W	M-W	M-W	M-W	M-W	M-W
B.A.	387 (incl. B.Sc.)	232 188	93 154	84 139	90 117	47	31	22	51 103
B.A. LL.B.	34	31	38	24	14	11	6	10	51 3
Law	60	59	3	56	3	28	17	9	39
M.A.	85	90	21	17	15	11	13	2	18 6
(All Grads) (Incl. M.Sc.)	6	7	4	28	29	55	46	68	252 495
B.Ed.				7	11	16	17	17	2
M.Ed.					11	1	1	1	17
B.Com.	94	73	75	62	50	35	19	13	14
B.Sc.	(Incl. in B.A.)	150	40	136	136	126	99	58	101 15
B.Sc., M.D.	59	5	57	98	76	81	64	6	247 84
Med.	221	208	16	186	180	280	194	21	86 10
B.Sc. for D.D.S.	6	8	5	11	18	25	11	2	14 139
Dent.	75	72	1	51	47	92	74	31	45 1
B.Sc. Nursing	53	56	76	89	76	83	78	39	57 1
B.Sc. Pharm.	9	12	13	15	18	11	7	11	69 85
B.Sc. Ag.						2	2	11	19
B.Sc. App. Sc.	263	274	139	149	109	88	65	60	23 3
B.Sc. H.Ec.	99	97	285	311	306	365	368	346	153 3
M.Sc.	(Incl. in M.A.)		94	87	94	99	107	2	508 4
			3	31	31	30	28	28	117 55
Total Full Session	1670	1779	1911	1838	1673	1701	1663	1565	3447

TABLE III.

ACADEMIC STAFF NUMBERS 1938-46

	1938-39	1939-40	1942-43	1943-44
Full time	106 (4) [77]	109 (11) [80]	118 (11) [73]	121 (10) [85]
Part time	117 (2)	122 (6) [26]	243 (14) [30]	195 (24) [30]
Other Departments	19	17	30 (3)	20
Total less Duplicates Academic Staff	248 (17)	391 (28)	326 (34)
	1940-41	1941-42	1944-45	1945-46
Full time	118 (8) [79]	129 (9) [78]	140 (13) [107]	157 (6) [104]
Part time	126 (11) [25]	176 (10) [24]	191 (26) [31]	242 (11) [34]
Other Departments	21	24	20	25
Total less Duplicates Academic Staff	265 (19)	329 (19)	351 (39)	419 (17)

"Other departments" covers the library, Extension Department, Research Council of Alberta, Industrial Laboratories, Provincial Laboratory of Public Health.

The figures in round brackets give the number on leave, chiefly on war service. Those in square brackets show number in rank of assistant professors or above.

REFERENCES

1. "The Gateway," 1949-45.
2. "The Trail," "The New Trail," 1939-45.
3. The President's Reports to the Board of Governors, 1939-46.
4. Edmonton "Journal," 1939-45.
5. Edmonton "Bulletin," 1939-45.
6. Reports:
 - (1) Contributions of members of the staff of the University of Alberta to war research. By O. J. Walker.
 - (2) War researches in the department of Chemistry. By E. H. Boomer.
 - (3) War time acceleration in the University of Alberta, Medicine, Dentistry and Education. By R. F. Shaner and M. E. LaZerte.
 - (4) Report on service courses at the University of Alberta. Filed by J. W. Porteous, July 9, 1945.
 - (5) History of the University of Alberta Contingent C.O.T.C. for the war period.
Report on the activities of the University of Alberta Contingent C.O.T.C. for term 1944-45.
 - (6) Report on activities of No. 8 U.A.S. for Session 1944-45. Daily Diary.
 - (7) Report on the work done with the industrial X-ray equipment at the University of Alberta 1942-1945. By H. E. Johns.
 - (8) Report of special committee on year-round schedules, No. 2, 1942. By R. F. Shaner.
7. The Minutes of the Board of Governors of the University of Alberta and of the Executive Committee of the Board of Governors of the University of Alberta, 1939-45.
8. Minutes of the Senate of the University of Alberta, 1939-45.
9. Interim Report of the University of Alberta Survey Committee.
10. Report on teacher-training included in interim report of the Post-War Reconstruction Committee tabled in Legislature.

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THOMAS LEWIS G LEWIS GWYNNE
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